

&lt;222&gt; (3176)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 123

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aagagaaaac	agaaatgctc	tgcccttgga	gaactgctaa	cctagggcta	ctgttgattt	300
tgactatctt	cttagtgccc	gaagcggagg	gtgctgctca	accaaacaac	tcattaatgc	360
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aagaaacaac	aacaaacgag	atacattata	attactgtct	gattttctta	cagttctaga	1380
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gaagaactga	tgttattaca	aagaaaatac	atgcccata	ccaaatatct	aaattgtgca	1560
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taccacatga	aatgtttctt	gtgcataat	ctctttgttt	ttgagtatat	ctgtaggata	2040
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ttaaatttgg	tcaaatatat	atgtcaaat	ccctccaaca	ttgttttaatt	gtgcctttcc	2160
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tggaattata	tttttggcca	tgtttgtta	agagtgaatg	cacgtgtgag	aacattagct	2340
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acctcttaac	ttgataatgt	caaaccaggc	atgttaaatg	acatcataga	aaaganttca	3180
agataaattt	tagaagttaa	atttatattg	acagaaaata	attgtatgaa	aatctctact	3240
atggggctgg	aacatgggtg	aacattagaa	tgatataaaa	aatttatatat	attctccaaa	3300

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tccacgctag acctgtcaaa ttagagaatc tagagattag acctggcgtg tcagcaaggt 3360
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&lt;210&gt; 124

&lt;211&gt; 370

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (370)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 124

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Met Leu Gly Ala Phe Val Trp Pro Ser Leu Leu Leu Ala Ala Ala
  1              5              10              15

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Cys Ile Cys Leu Leu Thr Phe Ile Asn Cys Ala Tyr Val Lys Trp Gly
      20              25              30

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Thr Leu Val Gln Asp Ile Phe Thr Tyr Ala Lys Val Leu Ala Leu Ile
    35              40              45

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Ala Val Ile Val Ala Gly Ile Val Arg Leu Gly Gln Gly Ala Ser Thr
    50              55              60

```

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His Phe Glu Asn Ser Phe Glu Gly Ser Ser Phe Ala Val Gly Asp Ile
    65              70              75              80

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Ala Leu Ala Leu Tyr Ser Ala Leu Phe Ser Tyr Ser Gly Trp Asp Thr
      85              90              95

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Leu Asn Tyr Val Thr Glu Glu Ile Lys Asn Pro Glu Arg Asn Leu Pro
    100              105              110

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Leu Ser Ile Gly Ile Ser Met Pro Ile Val Thr Ile Ile Tyr Ile Leu
    115              120              125

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Thr Asn Val Ala Tyr Tyr Thr Val Leu Asp Met Arg Asp Ile Leu Ala
    130              135              140

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Ser Asp Ala Val Ala Val Thr Phe Ala Asp Gln Ile Phe Gly Ile Phe
    145              150              155              160

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Asn Trp Ile Ile Pro Leu Ser Val Ala Leu Ser Cys Phe Gly Gly Leu
    165              170              175

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Asn Ala Ser Ile Val Ala Ala Ser Arg Leu Phe Phe Val Gly Ser Arg
    180              185              190

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Glu Gly His Leu Pro Asp Ala Ile Cys Met Ile His Val Glu Arg Phe

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195                      200                      205  
 Thr Pro Val Pro Ser Leu Leu Phe Asn Gly Ile Met Ala Leu Ile Tyr  
 210                      215                      220  
 Leu Cys Val Glu Asp Ile Phe Gln Leu Ile Asn Tyr Tyr Ser Phe Ser  
 225                      230                      235                      240  
 Tyr Trp Phe Phe Val Gly Leu Ser Ile Val Gly Gln Leu Tyr Leu Arg  
 245                      250                      255  
 Trp Lys Glu Pro Asp Arg Pro Arg Pro Leu Lys Leu Ser Val Phe Phe  
 260                      265                      270  
 Pro Ile Val Phe Cys Leu Cys Thr Ile Phe Leu Val Ala Val Pro Leu  
 275                      280                      285  
 Tyr Ser Asp Thr Ile Asn Ser Leu Ile Gly Ile Ala Ile Ala Leu Ser  
 290                      295                      300  
 Gly Leu Pro Phe Tyr Phe Leu Ile Ile Arg Val Pro Glu His Lys Arg  
 305                      310                      315                      320  
 Pro Leu Tyr Leu Arg Arg Ser Trp Gly Leu Pro Gln Gly Thr Ser Arg  
 325                      330                      335  
 Ser Cys Val Cys Gln Leu Leu Gln Lys Trp Ile Trp Lys Met Glu Glu  
 340                      345                      350  
 Arg Cys Pro Ser Asn Gly Ile Pro Ser Leu Thr Lys His His Leu Glu  
 355                      360                      365  
 Ser Xaa  
 370

<210> 125  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (86)  
 <223> Xaa equals stop translation

<400> 125  
 Met Gly Phe Trp Cys Gly Cys Pro Phe Cys Leu Leu Val Val Leu Leu  
 1                      5                      10                      15  
 Thr Asp Arg Thr Leu Ser Cys Arg Ser Val Gly Val Pro Cys Asn Val  
 20                      25                      30  
 Arg Cys Gln Cys Ala Pro Ala Gly Gly Cys Leu Pro Val Arg Leu Leu  
 35                      40                      45  
 Ala Gly Gln Gly Ser Gly Thr His Leu Arg Arg Gln Ser Ala Arg Ser  
 50                      55                      60

Gln Ile Ser Ser Cys Met Leu Gly Glu Pro Leu Leu Ser Ser Lys Leu  
 65 70 75 80

Ser Asp Arg Asp Ile Xaa  
 85

<210> 126  
 <211> 44  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (44)  
 <223> Xaa equals stop translation

<400> 126  
 Met Tyr Thr Lys Thr His Lys Phe Lys Phe Tyr Asn Phe Leu Ser Leu  
 1 5 10 15

Trp Ile Trp Lys Ile Phe Phe Leu Leu Phe Phe Ile Leu Ile Val Ala  
 20 25 30

Leu Ala Phe Pro Ile Pro Cys Leu Ser Ile Phe Xaa  
 35 40

<210> 127  
 <211> 319  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (264)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (303)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 127  
 Met Asn Thr Asp His Leu Arg Leu Thr Val Pro Asn Gly Ile Gly Ala  
 1 5 10 15

Leu Lys Leu Arg Glu Met Glu His Tyr Phe Ser Gln Gly Leu Ser Val  
 20 25 30

Gln Leu Phe Asn Asp Gly Ser Lys Gly Lys Leu Asn His Leu Cys Gly  
 35 40 45

Ala Asp Phe Val Lys Ser His Gln Lys Pro Pro Gln Gly Met Glu Ile  
 50 55 60

Lys Ser Asn Glu Arg Cys Ser Phe Asp Gly Asp Ala Asp Arg Ile  
 65 70 75 80

Val	Tyr	Tyr	Tyr	His	Asp	Ala	Asp	Gly	His	Phe	His	Leu	Ile	Asp	Gly	85	90	95
Asp	Lys	Ile	Ala	Thr	Leu	Ile	Ser	Ser	Phe	Leu	Lys	Glu	Leu	Leu	Val	100	105	110
Glu	Ile	Gly	Glu	Ser	Leu	Asn	Ile	Gly	Val	Val	Gln	Thr	Ala	Tyr	Ala	115	120	125
Asn	Gly	Ser	Ser	Thr	Arg	Tyr	Leu	Glu	Glu	Val	Met	Lys	Val	Pro	Val	130	135	140
Tyr	Cys	Thr	Lys	Thr	Gly	Val	Lys	His	Leu	His	His	Lys	Ala	Gln	Glu	145	150	155
Phe	Asp	Ile	Gly	Val	Tyr	Phe	Glu	Ala	Asn	Gly	His	Gly	Thr	Ala	Leu	165	170	175
Phe	Ser	Thr	Ala	Val	Glu	Met	Lys	Ile	Lys	Gln	Ser	Ala	Glu	Gln	Leu	180	185	190
Glu	Asp	Lys	Lys	Arg	Lys	Ala	Ala	Lys	Met	Leu	Glu	Asn	Ile	Ile	Asp	195	200	205
Leu	Phe	Asn	Gln	Ala	Ala	Gly	Asp	Ala	Ile	Ser	Asp	Met	Leu	Val	Ile	210	215	220
Glu	Ala	Ile	Leu	Ala	Leu	Lys	Gly	Leu	Thr	Val	Gln	Gln	Trp	Asp	Ala	225	230	235
Leu	Tyr	Thr	Asp	Leu	Pro	Asn	Arg	Gln	Leu	Lys	Val	Gln	Val	Ala	Asp	245	250	255
Arg	Arg	Val	Ile	Ser	Thr	Thr	Xaa	Ala	Glu	Arg	Gln	Ala	Val	Thr	Pro	260	265	270
Pro	Gly	Leu	Gln	Glu	Ala	Ile	Asn	Asp	Leu	Val	Lys	Lys	Tyr	Lys	Leu	275	280	285
Ser	Arg	Ala	Phe	Val	Arg	Pro	Ser	Gly	Thr	Glu	Asp	Val	Val	Xaa	Ser	290	295	300
Ile	Cys	Arg	Ser	Arg	Leu	Thr	Arg	Lys	Cys	Arg	Ser	Pro	Cys	Thr		305	310	315

Val Lys Cys Ile Pro Lys Tyr Phe Val Glu Met Leu Leu Xaa  
35 40 45

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<220>
<221> SITE
<222> (189)
<223> Xaa equals any of the naturally occurring L-amino acids.
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<220>
<221> SITE
<222> (275)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (414)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (438)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (641)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (643)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (696)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (697)
<223> Xaa equals any of the naturally occurring L-amino acids
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```
<400> 129
Met Ala Gly Leu Asn Cys Gly Val Ser Ile Ala Leu Leu Gly Val Leu
  1             5             10            15
```

Leu Leu Gly Ala Ala Arg Leu Pro Arg Gly Ala Glu Ala Phe Glu Ile  
20 25 30



340	345	350
Arg Ala Met Ser Leu Thr Ile Glu Pro Arg Pro Val Lys Gln Ser Arg		
355	360	365
Lys Phe Val Pro Gly Cys Phe Val Cys Leu Glu Ser Arg Thr Cys Ser		
370	375	380
Ser Asn Leu Thr Leu Thr Ser Gly Ser Lys His Lys Ile Ser Phe Leu		
385	390	400
Cys Asp Asp Leu Thr Arg Leu Trp Met Asn Val Glu Lys Xaa Ile Ser		
405	410	415
Cys Thr Asp His Arg Tyr Cys Gln Arg Lys Ser Tyr Ser Leu Gln Val		
420	425	430
Pro Ser Asp Ile Leu Xaa Leu Pro Val Glu Leu His Asp Phe Ser Trp		
435	440	445
Lys Leu Leu Val Pro Lys Asp Arg Leu Ser Leu Val Leu Val Pro Ala		
450	455	460
Gln Lys Leu Gln Gln His Thr His Glu Lys Pro Cys Asn Thr Ser Phe		
465	470	475
Ser Tyr Leu Val Ala Ser Ala Ile Pro Ser Gln Asp Leu Tyr Phe Gly		
485	490	495
Ser Phe Cys Pro Gly Gly Ser Ile Lys Gln Ile Gln Val Lys Gln Asn		
500	505	510
Ile Ser Val Thr Leu Arg Thr Phe Ala Pro Ser Phe Arg Gln Glu Ala		
515	520	525
Ser Arg Gln Gly Leu Thr Val Ser Phe Ile Pro Tyr Phe Lys Glu Glu		
530	535	540
Gly Val Phe Thr Val Thr Pro Asp Thr Lys Ser Lys Val Tyr Leu Arg		
545	550	555
Thr Pro Asn Trp Asp Arg Gly Leu Pro Ser Leu Thr Ser Val Ser Trp		
565	570	575
Asn Ile Ser Val Pro Arg Asp Gln Val Ala Cys Leu Thr Phe Phe Lys		
580	585	590
Glu Arg Ser Gly Val Val Cys Gln Thr Gly Arg Ala Phe Met Ile Ile		
595	600	605
Gln Glu Gln Arg Thr Arg Ala Glu Glu Ile Phe Ser Leu Asp Glu Asp		
610	615	620
Val Leu Pro Lys Pro Ser Phe His His His Ser Phe Trp Val Asn Ile		
625	630	635
Xaa Asn Xaa Ser Pro Thr Ser Gly Lys Gln Leu Asp Leu Leu Phe Ser		
645	650	655

Val Thr Leu Thr Pro Arg Thr Val Asp Leu Thr Val Ile Leu Ile Ala  
660 665 670

Ala Val Gly Gly Gly Val Leu Leu Leu Ser Ala Leu Gly Leu Ile Ile  
675 680 685

Cys Cys Val Lys Lys Lys Lys Xaa Xaa Thr Arg Gly Pro Ala Val Gly  
690 695 700

Ile Tyr Asn Gly Asn  
705

<210> 130

<211> 415

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (415)

<223> Xaa equals stop translation

<400> 130

Met Thr Lys Ala Arg Leu Phe Arg Leu Trp Leu Val Leu Gly Ser Val  
1 5 10 15

Phe Met Ile Leu Leu Ile Ile Val Tyr Trp Asp Ser Ala Gly Ala Ala  
20 25 30

His Phe Tyr Leu His Thr Ser Phe Ser Arg Pro His Thr Gly Pro Pro  
35 40 45

Leu Pro Thr Pro Gly Pro Asp Arg Asp Arg Glu Leu Thr Ala Asp Ser  
50 55 60

Asp Val Asp Glu Phe Leu Asp Lys Phe Leu Ser Ala Gly Val Lys Gln  
65 70 75 80

Ser Asp Leu Pro Arg Lys Glu Thr Glu Gln Pro Pro Ala Pro Gly Ser  
85 90 95

Met Glu Glu Asn Val Arg Gly Tyr Asp Trp Ser Pro Arg Asp Ala Arg  
100 105 110

Arg Ser Pro Asp Gln Gly Arg Gln Gln Ala Glu Arg Arg Ser Val Leu  
115 120 125

Arg Gly Phe Cys Ala Asn Ser Ser Leu Ala Phe Pro Thr Lys Glu Arg  
130 135 140

Ala Phe Asp Asp Ile Pro Asn Ser Glu Leu Ser His Leu Ile Val Asp  
145 150 155 160

Asp Arg His Gly Ala Ile Tyr Cys Tyr Val Pro Lys Val Ala Cys Thr  
165 170 175

Asn Trp Lys Arg Val Met Ile Val Leu Ser Gly Ser Leu Leu His Arg  
180 185 190

Gly Ala Pro Tyr Arg Asp Pro Leu Arg Ile Pro Arg Glu His Val His  
 195 200 205  
 Asn Ala Ser Ala His Leu Thr Phe Asn Lys Phe Trp Arg Arg Tyr Gly  
 210 215 220  
 Lys Leu Ser Arg His Leu Met Lys Val Lys Leu Lys Lys Tyr Thr Lys  
 225 230 235 240  
 Phe Leu Phe Val Arg Asp Pro Phe Val Arg Leu Ile Ser Ala Phe Arg  
 245 250 255  
 Ser Lys Phe Glu Leu Glu Asn Glu Glu Phe Tyr Arg Lys Phe Ala Val  
 260 265 270  
 Pro Met Leu Arg Leu Tyr Ala Asn His Thr Ser Leu Pro Ala Ser Ala  
 275 280 285  
 Arg Glu Ala Phe Arg Ala Gly Leu Lys Val Ser Phe Ala Asn Phe Ile  
 290 295 300  
 Gln Tyr Leu Leu Asp Pro His Thr Glu Lys Leu Ala Pro Phe Asn Glu  
 305 310 315 320  
 His Trp Arg Gln Val Tyr Arg Leu Cys His Pro Cys Gln Ile Asp Tyr  
 325 330 335  
 Asp Phe Val Gly Lys Leu Glu Thr Leu Asp Glu Asp Ala Ala Gln Leu  
 340 345 350  
 Leu Gln Leu Leu Gln Val Asp Arg Gln Leu Arg Phe Pro Pro Ser Tyr  
 355 360 365  
 Arg Asn Arg Thr Ala Ser Ser Trp Glu Glu Asp Trp Phe Ala Lys Ile  
 370 375 380  
 Pro Leu Ala Trp Arg Gln Gln Leu Tyr Lys Leu Tyr Glu Ala Asp Phe  
 385 390 395 400  
 Val Leu Phe Gly Tyr Pro Lys Pro Glu Asn Leu Leu Arg Asp Xaa  
 405 410 415

&lt;210&gt; 131

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 131

Met Gln Leu Gly Ser Val Leu Leu Thr Arg Cys Pro Phe Trp Gly Cys  
 1 5 10 15

Phe Ser Gln Leu Met Leu Tyr Ala Glu Arg Ala Glu Ala Arg Arg Lys  
 20 25 30

Pro Asp Ile Pro Val Pro Tyr Leu Tyr Phe Asp Met Gly Ala Ala Val  
 35 40 45

Leu Cys Ala Ser Phe Met Ser Phe Gly Val Lys Arg Arg Trp Phe Ala  
 50 55 60  
 Leu Gly Ala Ala Leu Gln Leu Ala Ile Ser Thr Tyr Ala Ala Tyr Ile  
 65 70 75 80  
 Gly Gly Tyr Val His Tyr Gly Asp Trp Leu Lys Val Arg Met Tyr Ser  
 85 90 95  
 Arg Thr Val Ala Ile Ile Gly Gly Phe Leu Val Leu Ala Ser Gly Ala  
 100 105 110  
 Gly Glu Leu Tyr Arg Arg Lys Pro Arg Ser Arg Ser Leu Gln Ser Thr  
 115 120 125  
 Gly Gln Val Phe Leu Gly Ile Tyr Leu Ile Cys Val Ala Tyr Ser Leu  
 130 135 140  
 Gln His Ser Lys Glu Asp Arg Leu Ala Tyr Leu Asn His Leu Pro Gly  
 145 150 155 160  
 Gly Glu Leu Met Ile Gln Leu Phe Phe Val Leu Tyr Gly Ile Leu Ala  
 165 170 175  
 Leu Ala Phe Leu Ser Gly Tyr Tyr Val Thr Leu Ala Ala Gln Ile Leu  
 180 185 190  
 Ala Val Leu Leu Pro Pro Val Met Leu Leu Ile Asp Gly Asn Val Ala  
 195 200 205  
 Tyr Trp His Asn Thr Arg Arg Val Glu Phe Trp Asn Gln Met Lys Leu  
 210 215 220  
 Leu Gly Glu Ser Val Gly Ile Phe Gly Thr Ala Val Ile Leu Ala Thr  
 225 230 235 240  
 Asp Gly

<210> 132  
 <211> 313  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (313)  
 <223> Xaa equals stop translation

<400> 132  
 Met Glu Ser Leu Tyr Asp Leu Trp Glu Phe Tyr Leu Pro Tyr Leu Tyr  
 1 5 10 15  
 Ser Cys Ile Ser Leu Met Gly Cys Leu Leu Leu Leu Cys Thr Pro  
 20 25 30  
 Val Gly Leu Ser Arg Met Phe Thr Val Met Gly His Leu Leu Val Lys  
 35 40 45

Pro Thr Ile Leu Glu Asp Leu Asp Glu Gln Ile Tyr Ile Ile Thr Leu  
 50 55 60  
 Glu Glu Glu Ala Leu Gln Arg Arg Leu Asn Gly Leu Ser Ser Ser Val  
 65 70 75 80  
 Glu Tyr Asn Ile Met Glu Leu Glu Gln Glu Leu Glu Asn Val Lys Thr  
 85 90 95  
 Leu Lys Thr Lys Leu Glu Arg Arg Lys Lys Ala Ser Ala Trp Glu Arg  
 100 105 110  
 Asn Leu Val Tyr Pro Ala Val Met Val Leu Leu Leu Ile Glu Thr Ser  
 115 120 125  
 Ile Ser Val Leu Leu Val Ala Cys Asn Ile Leu Cys Leu Leu Val Asp  
 130 135 140  
 Glu Thr Ala Met Pro Lys Gly Thr Arg Gly Pro Gly Ile Gly Asn Ala  
 145 150 155 160  
 Ser Leu Ser Thr Phe Gly Phe Val Gly Ala Ala Leu Glu Ile Ile Leu  
 165 170 175  
 Ile Phe Tyr Leu Met Val Ser Ser Val Val Gly Phe Tyr Ser Leu Arg  
 180 185 190  
 Phe Phe Gly Asn Phe Thr Pro Lys Lys Asp Asp Thr Thr Met Thr Lys  
 195 200 205  
 Ile Ile Gly Asn Cys Val Ser Ile Leu Val Leu Ser Ser Ala Leu Pro  
 210 215 220  
 Val Met Ser Arg Thr Leu Gly Ile Thr Arg Phe Asp Leu Leu Gly Asp  
 225 230 235 240  
 Phe Gly Arg Phe Asn Trp Leu Gly Asn Phe Tyr Ile Val Leu Ser Tyr  
 245 250 255  
 Asn Leu Leu Phe Ala Ile Val Thr Thr Leu Cys Leu Val Arg Lys Phe  
 260 265 270  
 Thr Ser Ala Val Arg Glu Glu Leu Phe Lys Ala Leu Gly Leu His Lys  
 275 280 285  
 Leu His Leu Pro Asn Thr Ser Arg Asp Ser Glu Thr Ala Lys Pro Ser  
 290 295 300  
 Val Asn Gly His Gln Lys Ala Leu Xaa  
 305 310

&lt;210&gt; 133

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (183)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 133

Met Met Val Cys Ser Ile Met Met Tyr Phe Leu Leu Gly Ile Thr Leu  
 1 5 10 15

Leu Arg Ser Tyr Met Gln Ser Val Trp Thr Glu Glu Ser Gln Cys Thr  
 20 25 30

Leu Leu Asn Ala Ser Ile Thr Glu Thr Phe Asn Cys Ser Phe Ser Cys  
 35 40 45

Gly Pro Asp Cys Trp Lys Leu Ser Gln Tyr Pro Cys Leu Gln Val Tyr  
 50 55 60

Val Asn Leu Thr Ser Ser Gly Glu Lys Leu Leu Leu Tyr His Thr Glu  
 65 70 75 80

Glu Thr Ile Lys Ile Asn Gln Lys Cys Ser Tyr Ile Pro Lys Cys Gly  
 85 90 95

Lys Asn Phe Glu Glu Ser Met Ser Leu Val Asn Val Val Met Glu Asn  
 100 105 110

Phe Arg Lys Tyr Gln His Phe Ser Cys Tyr Ser Asp Pro Glu Gly Asn  
 115 120 125

Gln Lys Ser Val Ile Leu Thr Lys Leu Tyr Ser Ser Asn Val Leu Phe  
 130 135 140

His Ser Leu Phe Trp Pro Thr Cys Met Met Ala Gly Gly Val Ala Ile  
 145 150 155 160

Val Ala Met Val Lys Leu Thr Gln Tyr Leu Ser Leu Leu Cys Glu Arg  
 165 170 175

Ile Gln Arg Ile Asn Arg Xaa  
 180

&lt;210&gt; 134

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (147)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 134

Met Trp Lys Leu Trp Arg Ala Glu Glu Gly Ala Ala Ala Leu Gly Gly  
 1 5 10 15

Ala Leu Phe Leu Leu Leu Phe Ala Leu Gly Val Arg Gln Leu Leu Lys  
 20 25 30

Gln Arg Arg Pro Met Gly Phe Pro Pro Gly Pro Pro Gly Leu Pro Phe  
 35 40 45

Ile Gly Asn Ile Tyr Ser Leu Ala Ala Ser Ser Glu Leu Pro His Val  
 50 55 60

Tyr Met Arg Lys Gln Ser Gln Val Tyr Gly Glu Val Gln Pro Arg Arg  
 65 70 75 80

Ala Pro Gly Arg Glu Gly Arg Gln Ala Gly Pro Gly Trp Pro Gly Pro  
 85 90 95

Ser Trp Leu Asp Leu Trp Pro Pro Leu Gly Arg Leu Val Gly Thr Ser  
 100 105 110

Pro Cys Ala Gly Cys Pro Leu Arg Asp Thr Arg Phe Pro Gly Leu Glu  
 115 120 125

Gly Arg Ser Pro Arg Arg Arg Ala Pro Leu Gln Gly Glu Pro Arg Pro  
 130 135 140

Cys Arg Xaa  
 145

<210> 135  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 135  
 Met Arg Val Arg Ile Gly Leu Thr Leu Leu Cys Ala Val Leu Leu  
 1 5 10 15

Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln Asp Glu Ser  
 20 25 30

Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val Lys Asp His  
 35 40 45

Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe Leu Asp Ser Glu  
 50 55 60

Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu Glu Asp Ser Leu Lys  
 65 70 75 80

Ser Gln Glu Gly Glu Ser Val Thr Glu Asp Ile Ser Phe Leu Glu Ser  
 85 90 95

Pro Asn Pro Glu Asn Lys Asp Tyr Glu Glu Pro Lys Lys Val Arg Lys  
 100 105 110

Pro Gly Ser Leu Asp Ile Phe Leu Ala Phe  
 115 120

<210> 136  
 <211> 112  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 136

Met Ala Arg Gly Ser Leu Arg Arg Leu Leu Arg Leu Leu Val Leu Gly  
 1 5 10 15

Leu Trp Leu Ala Leu Leu Arg Ser Val Ala Gly Glu Gln Ala Pro Gly  
 20 25 30

Thr Ala Pro Cys Ser Arg Gly Ser Ser Trp Ser Ala Asp Leu Asp Lys  
 35 40 45

Cys Met Asp Cys Ser Thr Ser Cys Pro Leu Pro Ala Ala Leu Ala His  
 50 55 60

Pro Trp Gly Arg Ser Glu Pro Asp Leu Arg Ala Gly Ala Ala Phe Trp  
 65 70 75 80

Leu Phe Gly Leu Glu Thr Met Pro Gln Arg Glu Lys Phe Thr Thr Pro  
 85 90 95

Ile Glu Glu Thr Gly Gly Glu Gly Cys Pro Ala Val Ala Leu Ile Gln  
 100 105 110

&lt;210&gt; 137

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (140)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 137

Met Leu Leu Gly Pro Val Pro Ile Leu His Ile Lys Ser Gln Leu Trp  
 1 5 10 15

Leu Leu Val Leu Ile Leu Val Val Ser Gly Leu Ser Ala Gly Met Ser  
 20 25 30

Ile Ile Pro Thr Phe Pro Glu Ile Leu Ser Cys Ala His Glu Asn Gly  
 35 40 45

Phe Glu Glu Gly Leu Ser Thr Leu Gly Leu Val Ser Gly Leu Phe Ser  
 50 55 60

Ala Met Trp Ser Ile Gly Ala Phe Met Gly Pro Thr Leu Gly Gly Phe  
 65 70 75 80

Leu Tyr Glu Lys Ile Gly Phe Glu Trp Ala Ala Ala Ile Gln Gly Leu  
 85 90 95

Trp Ala Leu Ile Ser Gly Leu Ala Met Gly Leu Phe Tyr Leu Leu Glu  
 100 105 110

Tyr Ser Arg Arg Lys Arg Ser Lys Ser Gln Asn Ile Leu Ser Thr Glu  
115 120 125

Glu Glu Arg Thr Thr Leu Leu Pro Asn Glu Thr Xaa  
130 135 140

<210> 138

<211> 404

<212> PRT

<213> Homo sapiens

<400> 138

Met Arg Leu Gln Asp Val Tyr Met Leu Asn Val Lys Gly Leu Ala Arg  
1 5 10 15

Gly Val Phe Gln Arg Val Thr Gly Ser Ala Ile Thr Asp Leu Tyr Ser  
20 25 30

Pro Lys Arg Leu Phe Ser Leu Thr Gly Asp Asp Cys Phe Gln Val Gly  
35 40 45

Lys Val Ala Tyr Asp Met Gly Asp Tyr Tyr His Ala Ile Pro Trp Leu  
50 55 60

Glu Glu Ala Val Ser Leu Phe Arg Gly Ser Tyr Gly Glu Trp Lys Thr  
65 70 75 80

Glu Asp Glu Ala Ser Leu Glu Asp Ala Leu Asp His Leu Ala Phe Ala  
85 90 95

Tyr Phe Arg Ala Gly Asn Val Ser Cys Ala Leu Ser Leu Ser Arg Glu  
100 105 110

Phe Leu Leu Tyr Ser Pro Asp Asn Lys Arg Met Ala Arg Asn Val Leu  
115 120 125

Lys Tyr Glu Arg Leu Leu Ala Glu Ser Pro Asn His Val Val Ala Glu  
130 135 140

Ala Val Ile Gln Arg Pro Asn Ile Pro His Leu Gln Thr Arg Asp Thr  
145 150 155 160

Tyr Glu Gly Leu Cys Gln Thr Leu Gly Ser Gln Pro Thr Leu Tyr Gln  
165 170 175

Ile Pro Ser Leu Tyr Cys Ser Tyr Glu Thr Asn Ser Asn Ala Tyr Leu  
180 185 190

Leu Leu Gln Pro Ile Arg Lys Glu Val Ile His Leu Glu Pro Tyr Ile  
195 200 205

Ala Leu Tyr His Asp Phe Val Ser Asp Ser Glu Ala Gln Lys Ile Arg  
210 215 220

Glu Leu Ala Glu Pro Trp Leu Gln Arg Ser Val Val Ala Ser Gly Glu  
225 230 235 240

[illegible]

<210> 139

<211> 96

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (96)

<223> Xaa equals stop translation

<400> 139

Met	Lys	Ala	Pro	His	Thr	Gly	Val	Leu	His	Leu	Gly	Ser	Val	Trp	Val
1				5					10					15	
Phe	Leu	Gly	Pro	Phe	Leu	Leu	Gly	Val	Gly	Tyr	Thr	Leu	Thr	Phe	Asn
			20					25					30		
Pro	Leu	Ser	Gly	Cys	Met	Ser	Thr	Val	Arg	Trp	Leu	Asn	Ser	Asn	Ile
		35					40					45			
Thr	Ala	Asn	Arg	Thr	Leu	Ser	Arg	Ser	Val	Cys	His	Val	Thr	Pro	Leu
	50					55					60				
His	Arg	Ser	Leu	Ser	Pro	His	Asp	Gly	Glu	Tyr	Leu	Arg	Gln	Met	Leu
65					70					75					80

Leu Asn Ser Ser Ser Arg Ala Gly Glu Ala Gly Ser Trp Gly Tyr Xaa  
                     85                    90                    95

<210> 140

<211> 240

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (240)

<223> Xaa equals stop translation

<400> 140

Met Gly Ser Cys Ala Arg Leu Leu Leu Leu Trp Gly Cys Thr Val Val  
   1                    5                    10                    15

Ala Ala Gly Leu Ser Gly Val Ala Gly Val Ser Ser Arg Cys Glu Lys  
                     20                    25                    30

Ala Cys Asn Pro Arg Met Gly Asn Leu Ala Leu Gly Arg Lys Leu Trp  
                     35                    40                    45

Ala Asp Thr Thr Cys Gly Gln Asn Ala Thr Glu Leu Tyr Cys Phe Tyr  
                     50                    55                    60

Ser Glu Asn Thr Asp Leu Thr Cys Arg Gln Pro Lys Cys Asp Lys Cys  
   65                    70                    75                    80

Asn Ala Ala Tyr Pro His Leu Ala His Leu Pro Ser Ala Met Ala Asp  
                     85                    90                    95

Ser Ser Phe Arg Phe Pro Arg Thr Trp Trp Gln Ser Ala Glu Asp Val  
                     100                    105                    110

His Arg Glu Lys Ile Gln Leu Asp Leu Glu Ala Glu Phe Tyr Phe Thr  
                     115                    120                    125

His Leu Ile Val Met Phe Lys Ser Pro Arg Pro Ala Ala Met Val Leu  
   130                    135                    140

Asp Arg Ser Gln Asp Phe Gly Lys Thr Trp Lys Pro Tyr Lys Tyr Phe  
   145                    150                    155                    160

Ala Thr Asn Cys Ser Ala Thr Phe Gly Leu Glu Asp Asp Val Val Lys  
                     165                    170                    175

Lys Gly Ala Ile Cys Thr Ser Lys Tyr Ser Ser Pro Phe Pro Cys Thr  
                     180                    185                    190

Gly Arg Lys Val Ile Phe Lys Ala Leu Ser Pro Pro Tyr Asp Thr Glu  
                     195                    200                    205

Asn Pro Tyr Ser Ala Lys Val Gln Glu Gln Leu Lys Ile Thr Asn Leu

210

215

220

Pro Arg Ala Ala Ala Glu Thr Thr Val Leu Ser Leu Ser Glu Lys Xaa  
 225 230 235 240

&lt;210&gt; 141

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (54)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 141

Met Met Ile Ser Gly Leu Lys Leu Leu Val Leu Phe Leu Lys Phe Ala  
 1 5 10 15

Pro Glu Asn Tyr Cys Leu Ser Thr Glu Thr Leu Gln Met Pro Asn Arg  
 20 25 30

His Leu Arg Leu Ser Lys Ala Thr Cys Tyr Leu Met Lys Cys Leu Leu  
 35 40 45

Pro Ser Tyr Phe Glu Xaa  
 50

&lt;210&gt; 142

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (67)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 142

Met Arg Ser Leu Ile Ser Ser His Pro Cys Gln His Leu Leu Leu Leu  
 1 5 10 15

Leu Leu Leu Leu Phe Leu Ile Leu Ala Ile Leu Val Asp Val Lys Trp  
 20 25 30

Tyr Leu Val Leu Phe Ile Cys Ile Ser Leu Met Thr Ser Asp Val Glu  
 35 40 45

His Leu Phe Met Cys Leu Leu Ala Ile Arg Ile Ser Ser Trp Arg Asn  
 50 55 60

Val Tyr Xaa  
 65

<210> 143  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (48)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (55)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (58)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (67)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 143  
 Met Phe Tyr Lys Leu Thr Leu Ile Leu Cys Glu Leu Ser Val Ala Gly  
   1                  5                  10                  15  
 Val Thr Gln Ala Ala Ser Gln Arg Pro Leu Gln Arg Leu Pro Arg His  
           20                  25                  30  
 Ile Cys Ser Gln Arg Asn Pro Pro Gly Arg Cys Leu Leu Lys Ala Xaa  
           35                  40                  45  
 Leu Gln Thr Thr Trp Gly Xaa Pro Asp Xaa Gln Phe Pro Gly Cys Pro  
   50                  55                  60  
 His Pro Xaa Arg Val Thr Leu Asn Ala Arg Gln Met Gly Asn Gly Lys  
   65                  70                  75                  80  
 Glu Lys Lys Ala Ala Asp Leu Lys Leu Lys Phe Pro Gln Lys Arg Phe  
           85                  90                  95  
 Tyr Leu Ser Ala Phe Ser Glu Arg Ile Lys Ala Phe  
       100                  105

<210> 144  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (84)  
 <223> Xaa equals stop translation

&lt;400&gt; 144

Met Ala Ser Val Gly Thr Thr Leu Val Ser Pro Leu Leu Cys Leu Leu  
 1 5 10 15

Ile Pro Thr Arg Val Ser Asp Pro Trp Leu Gln Asn Thr Pro Leu His  
 20 25 30

Pro Trp Lys Thr Ile Thr Ile Ile Asp Tyr Tyr Leu Ser Leu Gly Phe  
 35 40 45

Leu Gly Trp Thr Gly Leu Ser Trp Val Val His Phe Gly Ala Ser Ala  
 50 55 60

Val Met Gly Arg Gln Trp Leu Gly Ser Leu Gln Arg Leu Pro Cys Ile  
 65 70 75 80

Ser Gly Ser Xaa

&lt;210&gt; 145

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 145

Met Gly Ser Arg Phe Leu Leu Val Leu Leu Ser Gly Leu Thr Val Leu  
 1 5 10 15

Leu Ala Leu Pro Gly Ser Glu Ala Lys Asn Ser Gly Ala Ser Cys Pro  
 20 25 30

Pro Cys Pro Lys Tyr Ala Ser Cys His Asn Ser Thr His Cys Thr Cys  
 35 40 45

Glu Asp Gly Phe Arg Ala Arg Ser Gly Arg Thr Tyr Phe His Asp Ser  
 50 55 60

Ser Glu Lys Cys Glu Asp Ile Asn Glu Cys Glu Thr Gly Leu Ala Lys  
 65 70 75 80

Cys Lys Tyr Lys Ala Tyr Cys Arg Asn Lys Val Gly Gly Tyr Ile Cys  
 85 90 95

Ser Cys Leu Val Lys Tyr Thr Leu Phe Asn Phe Leu Ala Gly Ile Ile  
 100 105 110

Asp Tyr Asp His Pro Asp Cys Tyr Glu Asn Asn Ser Gln Gly Thr Thr  
 115 120 125

Gln Ser Asn Val Asp Ile Trp Val Ser Gly Val Lys Pro Gly Phe Gly  
 130 135 140

Lys Gln Leu Val Arg Ile Thr Met Pro Phe Ser Tyr Pro Asn Ile Asn  
 145 150 155 160

Met Ser Ser Cys Asp Phe  
 165

<210> 146  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens

<400> 146  
 Met Lys Pro Lys His Leu Glu Trp Cys Leu Ala His Ser Trp Cys Val  
 1 5 10 15  
 Ile Trp Leu Ser Phe Val Ser Pro Pro Thr Ser His Leu Glu Cys Asp  
 20 25 30  
 Gly Phe Pro Gly Ser Leu Leu Pro Pro Cys Glu Glu Gly Arg Cys Phe  
 35 40 45  
 Pro Phe Thr Phe His His His Asp Cys His Gly Cys Ser Pro Leu Gln  
 50 55 60  
 Ser Ser Pro Gly Gln His  
 65 70

<210> 147  
 <211> 412  
 <212> PRT  
 <213> Homo sapiens

<400> 147  
 Met Cys Cys Trp Pro Leu Leu Leu Leu Trp Gly Leu Leu Pro Gly Thr  
 1 5 10 15  
 Ala Ala Gly Gly Ser Gly Arg Thr Tyr Pro His Arg Thr Leu Leu Asp  
 20 25 30  
 Ser Glu Gly Lys Tyr Trp Leu Gly Trp Ser Gln Arg Gly Ser Gln Ile  
 35 40 45  
 Ala Phe Arg Leu Gln Val Arg Thr Ala Gly Tyr Val Gly Phe Gly Phe  
 50 55 60  
 Ser Pro Thr Gly Ala Met Ala Ser Ala Asp Ile Val Val Gly Gly Val  
 65 70 75 80  
 Ala His Gly Arg Pro Tyr Leu Gln Asp Tyr Phe Thr Asn Ala Asn Arg  
 85 90 95  
 Glu Leu Lys Lys Asp Ala Gln Gln Asp Tyr His Leu Glu Tyr Ala Met  
 100 105 110  
 Glu Asn Ser Thr His Thr Ile Ile Glu Phe Thr Arg Glu Leu His Thr  
 115 120 125  
 Cys Asp Ile Asn Asp Lys Ser Ile Thr Asp Ser Thr Val Arg Val Ile  
 130 135 140  
 Trp Ala Tyr His His Glu Asp Ala Gly Glu Ala Gly Pro Lys Tyr His  
 145 150 155 160

Asp Ser Asn Arg Gly Thr Lys Ser Leu Arg Leu Leu Asn Pro Glu Lys  
 165 170 175  
 Thr Ser Val Leu Ser Thr Ala Leu Pro Tyr Phe Asp Leu Val Asn Gln  
 180 185 190  
 Asp Val Pro Ile Pro Asn Lys Asp Thr Thr Tyr Trp Cys Gln Met Phe  
 195 200 205  
 Lys Ile Pro Val Phe Gln Glu Lys His His Val Ile Lys Val Glu Pro  
 210 215 220  
 Val Ile Gln Arg Gly His Glu Ser Leu Val His His Ile Leu Leu Tyr  
 225 230 235 240  
 Gln Cys Ser Asn Asn Phe Asn Asp Ser Val Leu Glu Ser Gly His Glu  
 245 250 255  
 Cys Tyr His Pro Asn Met Pro Asp Ala Phe Leu Thr Cys Glu Thr Val  
 260 265 270  
 Ile Phe Ala Trp Ala Ile Gly Gly Glu Gly Phe Ser Tyr Pro Pro His  
 275 280 285  
 Val Gly Leu Ser Leu Gly Thr Pro Leu Asp Pro His Tyr Val Leu Leu  
 290 295 300  
 Glu Val His Tyr Asp Asn Pro Thr Tyr Glu Glu Gly Leu Ile Asp Asn  
 305 310 315 320  
 Ser Gly Leu Arg Leu Phe Tyr Thr Met Asp Ile Arg Lys Tyr Asp Ala  
 325 330 335  
 Gly Val Ile Glu Ala Gly Leu Trp Val Ser Leu Phe His Thr Ile Pro  
 340 345 350  
 Pro Gly Met Pro Glu Phe Gln Ser Glu Gly His Cys Thr Leu Glu Cys  
 355 360 365  
 Leu Glu Glu Leu Trp Lys Pro Lys Ser Gln Val Glu Phe Met Cys Leu  
 370 375 380  
 Leu Phe Phe Ser Met Leu Thr Trp Leu Ala Glu His Gln Ala Ala Ser  
 385 390 395 400  
 Phe Ser Lys Arg Glu Gly Asn Glu Ile Thr Cys Leu  
 405 410

&lt;210&gt; 148

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (85)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 148

```

Met Asn Val Phe Leu Pro Pro Ala Leu Gly Thr Trp Gly Val Ala Arg
 1              5              10              15

Phe Phe Pro His Leu Val Pro Glu Arg Trp Cys Leu Val Phe Cys Cys
      20              25              30

Trp Ile Phe Phe Phe Phe Phe Phe Phe Cys Thr Lys Val Ala Thr Arg
      35              40              45

Ser Val Leu Gly Asp Gln Ala Gly Leu Gly Val Gly Gly Pro His Leu
      50              55              60

Pro Leu Pro Gly Ser His Ser Val Ser Val Pro Glu Lys Thr Ile Phe
      65              70              75              80

Ser Leu Lys Gln Xaa
              85

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&lt;210&gt; 149

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (154)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 149

```

Met Gly Arg Leu Pro Leu Leu Arg Arg Val Leu Lys Gly Leu Gln Leu
 1              5              10              15

Leu Leu Ser Leu Leu Ala Phe Ile Cys Glu Glu Val Val Ser Gln Cys
      20              25              30

Thr Leu Cys Gly Gly Leu Tyr Phe Phe Glu Phe Val Ser Cys Ser Ala
      35              40              45

Phe Leu Leu Ser Leu Leu Ile Leu Ile Val Tyr Cys Thr Pro Phe Tyr
      50              55              60

Glu Arg Val Asp Thr Thr Lys Val Lys Ser Ser Asp Phe Tyr Ile Thr
      65              70              75              80

Leu Gly Thr Gly Cys Val Phe Leu Leu Ala Ser Ile Ile Phe Val Ser
      85              90              95

Thr His Asp Arg Thr Ser Ala Glu Ile Ala Ala Ile Val Phe Gly Phe
      100              105              110

Ile Ala Ser Phe Met Phe Leu Leu Asp Phe Ile Thr Met Leu Tyr Glu
      115              120              125

Lys Arg Gln Glu Ser Gln Leu Arg Lys Pro Glu Asn Thr Thr Arg Ala
      130              135              140

Glu Ala Leu Thr Glu Pro Leu Asn Ala Xaa

```

145

150

&lt;210&gt; 150

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (130)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 150

Met Arg Gly His Leu Ala Gly Phe Pro Ala Leu Ser Gly Leu Ala Ser  
 1 5 10 15

Val Cys Leu Trp Ala Thr Phe Ser Ala Gln Leu Pro Gly Pro Val Ala  
 20 25 30

Ala Thr Ser Trp Thr Pro Ala Pro Leu Gly Cys Ser Ala Ala Arg Ser  
 35 40 45

Gly Pro Glu Lys Arg Leu Gly Thr Ala Ala Pro Gly Ser Ala Ala Ser  
 50 55 60

Leu Ala Gln Ala Gly Pro Gly Ala Pro Cys Arg Val Leu Pro Val Asp  
 65 70 75 80

Pro Ala Pro Ala Ala Leu Asn Val Arg Glu Pro Gly Trp Leu Gly Gly  
 85 90 95

Leu Phe Asp Gly Ala Leu Leu Gln Val Leu Leu Asn Phe Leu Arg Lys  
 100 105 110

Ser Thr Asp Val Leu Met Asp Thr Arg Glu Ala Glu Ser Leu Glu Val  
 115 120 125

Glu Xaa  
 130

&lt;210&gt; 151

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (62)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 151

Met Leu Phe Trp Ala Tyr Pro Ile Cys Val Phe Ile Asp Ser Leu Ser  
 1 5 10 15

Cys Gln Pro Cys Leu Trp Ser Thr Gly Ala Thr Ser His Phe Asn Ser  
 20 25 30

108

Pro Thr Thr Ser Pro Leu Phe Thr Leu Phe Met Pro Cys Ala Leu Ala  
 35 40 45

Pro Asn Pro Phe Thr Gln Leu Gly Lys Leu Asp Asp Arg Xaa  
 50 55 60

&lt;210&gt; 152

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (225)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 152

Met Gly Ile Phe Pro Gly Ile Ile Leu Ile Phe Leu Arg Val Lys Phe  
 1 5 10 15

Ala Thr Ala Ala Val Ile Val Ser Gly His Gln Lys Ser Thr Thr Val  
 20 25 30

Ser His Glu Met Ser Gly Leu Asn Trp Lys Pro Phe Val Tyr Gly Gly  
 35 40 45

Leu Ala Ser Ile Val Ala Glu Phe Gly Thr Phe Pro Val Asp Leu Thr  
 50 55 60

Lys Thr Arg Leu Gln Val Gln Gly Gln Ser Ile Asp Ala Arg Phe Lys  
 65 70 75 80

Glu Ile Lys Tyr Arg Gly Met Phe His Ala Leu Phe Arg Ile Cys Lys  
 85 90 95

Glu Glu Gly Val Leu Ala Leu Tyr Ser Gly Ile Ala Pro Ala Leu Leu  
 100 105 110

Arg Gln Ala Ser Tyr Gly Thr Ile Lys Ile Gly Ile Tyr Gln Ser Leu  
 115 120 125

Lys Arg Leu Phe Val Glu Arg Leu Glu Asp Glu Thr Leu Leu Ile Asn  
 130 135 140

Met Ile Cys Gly Val Val Ser Gly Val Ile Ser Ser Thr Ile Ala Asn  
 145 150 155 160

Pro Thr Asp Val Leu Lys Ile Arg Met Gln Ala Gln Gly Ser Leu Phe  
 165 170 175

Gln Gly Ser Met Ile Gly Ser Phe Ile Asp Ile Tyr Gln Gln Glu Gly  
 180 185 190

Thr Arg Gly Leu Trp Arg Val Ser Thr Leu Phe Leu Leu Leu Ser Tyr  
 195 200 205

Thr Leu Ser Ser Tyr Asn Leu Gln Arg Ile Phe Phe Tyr Ile Lys Thr  
 210 215 220

Xaa  
225

<210> 153  
<211> 69  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (69)  
<223> Xaa equals stop translation

<400> 153  
Met Leu Met Leu Leu Thr Leu Leu Val Leu Gly Met Val Trp Val Ala  
1 5 10 15  
Ser Ala Ile Val Asp Lys Asn Lys Ala Asn Arg Glu Ser Leu Tyr Asp  
20 25 30  
Phe Trp Glu Tyr Tyr Leu Pro Tyr Leu Tyr Ser Cys Ile Ser Phe Leu  
35 40 45  
Gly Val Leu Leu Leu Leu Ala Ala Gly Arg Pro Gly Gly Ala Ala Val  
50 55 60  
Leu Leu Ser Leu Xaa  
65

<210> 154  
<211> 84  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (84)  
<223> Xaa equals stop translation

<400> 154  
Met Tyr Gly Val Cys Leu Cys Val Ile Val Cys Val Ser Gly Val Ser  
1 5 10 15  
Leu Cys Leu Tyr Val Trp Gly Val Ser Val Cys Asp Cys Val Ser Val  
20 25 30  
Phe Met Cys Val Cys Leu Cys Val Ile Phe Cys Val Tyr Gly Lys Pro  
35 40 45  
Arg Thr Glu His Tyr His Ser Pro His Leu Ala Lys Gln Lys Ala Phe  
50 55 60  
Arg Glu Met Cys Gly Arg His Asp Val Ser Ala Ala Gly Ile Phe Gln  
65 70 75 80  
Ser Tyr Val Xaa

<210> 155  
 <211> 61  
 <212> PRT  
 <213> Homo. sapiens

<220>  
 <221> SITE  
 <222> (61)  
 <223> Xaa equals stop translation

<400> 155  
 Met His Val Leu Leu Phe Ser Phe Leu Ile Pro Phe Leu Leu Leu Ser  
 1 5 10 15

Pro Val Gly Val Thr Cys Asn Ser His Met Leu Glu Arg Gln Val Ser  
 20 25 30

Trp Leu Lys Lys Arg Ser Thr Gln Ala Ser Gln Gln Phe Asn Lys Phe  
 35 40 45

Leu Arg Gly Ile Ser Asn Val Gly Arg Ile Val Ile Xaa  
 50 55 60

<210> 156  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (84)  
 <223> Xaa equals stop translation

<400> 156  
 Met Cys Leu Leu Val Glu Tyr Ser Leu Met Ile Leu Thr Ile Ile Pro  
 1 5 10 15

Ser Leu Leu Ser Phe Val Leu Cys Leu Lys Gly Ile Lys His Gly Asn  
 20 25 30

Tyr Ile Phe Gln Thr Pro Leu Pro Glu Gly Tyr Gly Trp Ile Ser Ala  
 35 40 45

Met Ser Gly Leu Cys Ile Lys Phe Gly Arg Arg Lys Arg Arg Lys Thr  
 50 55 60

Trp Leu Leu Gln Val Gly Thr Leu Ala Thr Ile Asp Thr Glu Phe Ala  
 65 70 75 80

Arg Ser Cys Xaa

<210> 157  
 <211> 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (162)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 157

Met	Ala	Leu	Ser	Leu	Thr	Leu	Cys	Phe	Val	Met	Phe	Trp	Thr	Pro	Asn
1				5					10					15	

Val	Ser	Glu	Lys	Ile	Leu	Ile	Asp	Ile	Ile	Gly	Val	Asp	Phe	Ala	Phe
		20					25						30		

Ala	Glu	Leu	Cys	Val	Val	Pro	Leu	Arg	Ile	Phe	Ser	Phe	Phe	Pro	Val
	35						40					45			

Pro	Val	Thr	Val	Arg	Ala	His	Leu	Thr	Gly	Trp	Leu	Met	Thr	Leu	Lys
	50					55					60				

Lys	Thr	Phe	Val	Leu	Ala	Pro	Ser	Ser	Val	Leu	Arg	Ile	Ile	Val	Leu
65				70					75						80

Ile	Ala	Ser	Leu	Val	Val	Leu	Pro	Tyr	Leu	Gly	Val	His	Gly	Ala	Thr
			85					90						95	

Leu	Gly	Val	Gly	Ser	Leu	Leu	Ala	Gly	Phe	Val	Gly	Glu	Ser	Thr	Met
		100						105					110		

Val	Ala	Ile	Ala	Ala	Cys	Tyr	Val	Tyr	Arg	Lys	Gln	Lys	Lys	Lys	Met
	115						120					125			

Glu	Asn	Glu	Ser	Ala	Thr	Glu	Gly	Glu	Asp	Ser	Ala	Met	Thr	Asp	Met
	130					135					140				

Pro	Pro	Thr	Glu	Glu	Val	Thr	Asp	Ile	Val	Glu	Met	Arg	Glu	Glu	Asn
145					150					155					160

Glu Xaa

&lt;210&gt; 158

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (96)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (107)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

<221> SITE  
 <222> (111)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (115)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (122)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (132)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 158  
 Met Glu Pro Gln Leu Gly Pro Glu Ala Ala Ala Leu Arg Pro Gly Trp  
     1                    5                    10                    15  
 Leu Ala Leu Leu Leu Trp Val Ser Ala Leu Ser Cys Ser Phe Ser Leu  
                     20                    25                    30  
 Pro Ala Ser Ser Leu Ser Ser Leu Val Pro Gln Val Arg Thr Ser Tyr  
                     35                    40                    45  
 Asn Phe Gly Arg Thr Phe Leu Gly Leu Asp Lys Cys Asn Ala Cys Ile  
                     50                    55                    60  
 Gly Thr Ser Ile Cys Lys Lys Phe Phe Lys Glu Glu Ile Arg Ser Asp  
                     65                    70                    75                    80  
 Asn Trp Leu Ala Ser His Leu Gly Thr Ala Ser Arg Phe Pro Leu Xaa  
                     85                    90                    95  
 Ser Tyr Pro Cys Lys Leu Leu Gln Met Ile Xaa Lys Ile Trp Xaa Pro  
                     100                    105                    110  
 Cys Gly Xaa Leu Leu Thr Gly Gln Gln Xaa Ser Asn Glu Ile Ser Lys  
                     115                    120                    125  
 Gln Glu Ile Xaa Cys Leu Leu His Pro Pro Pro Lys Asn Leu His Ile  
                     130                    135                    140  
 Asp Val  
 145

<210> 159  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (143)

<223> Xaa equals stop translation

<400> 159

Met Trp Trp Ala Val Met Gly Gly Val Ile Gly Ser Trp Leu Ser Pro  
1 5 10 15

Leu Ser Ile Ala Glu Cys Cys His Asp Leu Trp Thr Ser Gln Ser Cys  
20 25 30

Glu His Ala Gly Ala Leu Cys Gly Asp Leu Leu Cys Ala Cys Arg Lys  
35 40 45

Val Gly Val Trp Cys Ala Leu Gln Gln His Trp Trp Asn Arg Cys Val  
50 55 60

Cys Pro His Ala Val Ile Arg Val His Cys Thr Gly Ala Ser Tyr Thr  
65 70 75 80

Leu Gln Lys Ile Cys Ser Cys Asn Pro Lys Phe Met Gly Arg His Pro  
85 90 95

His Arg Trp Gln Gln Ile Arg Lys Cys Ser Gln Pro Val Leu Arg Gly  
100 105 110

Ser Arg Ala Ala Phe Ile Trp Val Arg Leu Ala Ala Leu Asn Phe Ile  
115 120 125

Ser Ser Phe Arg Cys Ile Ser Leu Ile Ser Tyr Ser Ala Phe Xaa  
130 135 140

<210> 160

<211> 51

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (51)

<223> Xaa equals stop translation

<400> 160

Met Lys Val Ser Asp Phe Asn Phe Leu Ile Phe Leu Ile Phe Ala Leu  
1 5 10 15

Phe Leu Thr Leu Glu Ala Phe Leu Lys Phe Thr Lys Arg Val Leu Ala  
20 25 30

Val Val Gly Asn Leu Pro Glu Pro Ile Ile Lys Thr Ile Gly Phe  
35 40 45

Leu Tyr Xaa  
50

<210> 161

<211> 65

<212> PRT

<213> Homo sapiens

<220>  
<221> SITE  
<222> (65)  
<223> Xaa equals stop translation

<400> 161  
Met Val Trp Ser Ala Ala Pro Ala Pro Cys Cys Leu Leu Gly Val Leu  
1 5 10 15  
Gly Leu Val Gln Val Leu Gly Ala Gln Ala Val Gly Pro Trp Thr Ala  
20 25 30  
Ser Ala Cys Leu Gly Ala Ala Gln Ala Gln Pro Cys Arg Pro Cys Lys  
35 40 45  
Glu Ser Ser Leu Arg Leu Phe Ser Ala Ser Ala Pro Ser Met Thr His  
50 55 60  
Xaa  
65

<210> 162  
<211> 59  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (59)  
<223> Xaa equals stop translation

<400> 162  
Met Glu Lys Tyr Cys Leu Gly Asn Asn Met Leu Ser Arg Phe Cys Leu  
1 5 10 15  
Phe Leu Ile Met Leu Leu His Ile Leu Leu Phe Leu Val Ile Phe Ile  
20 25 30  
Gln Arg His Thr Val Val Ser Leu Ser Lys His His Pro Phe Val Pro  
35 40 45  
Thr Asn Gly Ser Lys Ser Tyr Ser Ser Phe Xaa  
50 55

<210> 163  
<211> 374  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (84)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE

&lt;222&gt; (112)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 163

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Met Arg Pro Gly Thr Ala Leu Gln Ala Val Leu Leu Ala Val Leu Leu
 1           5           10           15

Val Gly Leu Arg Ala Ala Thr Gly Arg Leu Leu Ser Gly Gln Pro Val
          20           25           30

Cys Arg Gly Gly Thr Gln Arg Pro Cys Tyr Lys Val Ile Tyr Phe His
          35           40           45

Asp Thr Ser Arg Arg Leu Asn Phe Glu Glu Ala Lys Glu Ala Cys Arg
          50           55           60

Arg Asp Gly Gly Gln Leu Val Ser Ile Glu Ser Glu Asp Glu Gln Lys
          65           70           75           80

Leu Ile Glu Xaa Phe Ile Glu Asn Leu Leu Pro Ser Asp Gly Asp Phe
          85           90           95

Trp Ile Gly Leu Arg Arg Arg Glu Glu Lys Gln Ser Asn Ser Thr Xaa
          100          105          110

Cys Gln Asp Leu Tyr Ala Trp Thr Asp Gly Ser Ile Ser Gln Phe Arg
          115          120          125

Asn Trp Tyr Val Asp Glu Pro Ser Cys Gly Ser Glu Val Cys Val Val
          130          135          140

Met Tyr His Gln Pro Ser Ala Pro Ala Gly Ile Gly Gly Pro Tyr Met
          145          150          155          160

Phe Gln Trp Asn Asp Asp Arg Cys Asn Met Lys Asn Asn Phe Ile Cys
          165          170          175

Lys Tyr Ser Asp Glu Lys Pro Ala Val Pro Ser Arg Glu Ala Glu Gly
          180          185          190

Glu Glu Thr Glu Leu Thr Thr Pro Val Leu Pro Glu Glu Thr Gln Glu
          195          200          205

Glu Asp Ala Lys Lys Thr Phe Lys Glu Ser Arg Glu Ala Ala Leu Asn
          210          215          220

Leu Ala Tyr Ile Leu Ile Pro Ser Ile Pro Leu Leu Leu Leu Val
          225          230          235          240

Val Thr Thr Val Val Cys Trp Val Trp Ile Cys Arg Lys Arg Lys Arg
          245          250          255

Glu Gln Pro Asp Pro Ser Thr Lys Lys Gln His Thr Ile Trp Pro Ser
          260          265          270

Pro His Gln Gly Asn Ser Pro Asp Leu Glu Val Tyr Asn Val Ile Arg
          275          280          285

Lys Gln Ser Glu Ala Asp Leu Ala Glu Thr Arg Pro Asp Leu Lys Asn

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290                      295                      300  
 Ile Ser Phe Arg Val Cys Ser Gly Glu Ala Thr Pro Asp Asp Met Ser  
 305                      310                      315                      320  
 Cys Asp Tyr Asp Asn Met Ala Val Asn Pro Ser Glu Ser Gly Phe Val  
                     325                      330                      335  
 Thr Leu Val Ser Val Glu Ser Gly Phe Val Thr Asn Asp Ile Tyr Glu  
                     340                      345                      350  
 Phe Ser Pro Asp Gln Met Gly Arg Ser Lys Glu Ser Gly Trp Val Glu  
                     355                      360                      365  
 Asn Glu Ile Tyr Gly Tyr  
 370

<210> 164  
 <211> 64  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (64)  
 <223> Xaa equals stop translation

<400> 164  
 Met His Pro Gln Leu Ile Pro Ser Val Ile Ala Val Val Phe Ile Leu  
   1                      5                      10                      15  
 Leu Leu Gly Val Cys Phe Ile Ala Ser Cys Leu Val Thr His His Asn  
                     20                      25                      30  
 Phe Ser Arg Cys Lys Arg Gly Thr Gly Val His Lys Leu Glu His His  
                     35                      40                      45  
 Ala Lys Leu Lys Cys Ile Lys Glu Lys Ser Glu Leu Lys Ser Cys Xaa  
   50                      55                      60

<210> 165  
 <211> 743  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (743)  
 <223> Xaa equals stop translation

<400> 165  
 Met Ala Val Arg Glu Leu Cys Phe Pro Arg Gln Arg Gln Val Leu Phe  
   1                      5                      10                      15

Leu Phe Leu Phe Trp Gly Val Ser Leu Ala Gly Ser Gly Phe Gly Arg  
 20 25 30  
 Tyr Ser Val Thr Glu Glu Thr Glu Lys Gly Ser Phe Val Val Asn Leu  
 35 40 45  
 Ala Lys Asp Leu Gly Leu Ala Glu Gly Glu Leu Ala Ala Arg Gly Thr  
 50 55 60  
 Arg Val Val Ser Asp Asp Asn Lys Gln Tyr Leu Leu Leu Asp Ser His  
 65 70 75 80  
 Thr Gly Asn Leu Leu Thr Asn Glu Lys Leu Asp Arg Glu Lys Leu Cys  
 85 90 95  
 Gly Pro Lys Glu Pro Cys Met Leu Tyr Phe Gln Ile Leu Met Asp Asp  
 100 105 110  
 Pro Phe Gln Ile Tyr Arg Ala Glu Leu Arg Val Arg Asp Ile Asn Asp  
 115 120 125  
 His Ala Pro Val Phe Gln Asp Lys Glu Thr Val Leu Lys Ile Ser Glu  
 130 135 140  
 Asn Thr Ala Glu Gly Thr Ala Phe Arg Leu Glu Arg Ala Gln Asp Pro  
 145 150 155 160  
 Asp Gly Gly Leu Asn Gly Ile Gln Asn Tyr Thr Ile Ser Pro Asn Ser  
 165 170 175  
 Phe Phe His Ile Asn Ile Ser Gly Gly Asp Glu Gly Met Ile Tyr Pro  
 180 185 190  
 Glu Leu Val Leu Asp Lys Ala Leu Asp Arg Glu Glu Gln Gly Glu Leu  
 195 200 205  
 Ser Leu Thr Leu Thr Ala Leu Asp Gly Gly Ser Pro Ser Arg Ser Gly  
 210 215 220  
 Thr Ser Thr Val Arg Ile Val Val Leu Asp Val Asn Asp Asn Ala Pro  
 225 230 235 240  
 Gln Phe Ala Gln Ala Leu Tyr Glu Thr Gln Ala Pro Glu Asn Ser Pro  
 245 250 255  
 Ile Gly Phe Leu Ile Val Lys Val Trp Ala Glu Asp Val Asp Ser Gly  
 260 265 270  
 Val Asn Ala Glu Val Ser Tyr Ser Phe Phe Asp Ala Ser Glu Asn Ile  
 275 280 285  
 Arg Thr Thr Phe Gln Ile Asn Pro Phe Ser Gly Glu Ile Phe Leu Arg  
 290 295 300  
 Glu Leu Leu Asp Tyr Glu Leu Val Asn Ser Tyr Lys Ile Asn Ile Gln  
 305 310 315 320  
 Ala Met Asp Gly Gly Gly Leu Ser Ala Arg Cys Arg Val Leu Val Glu  
 325 330 335

Val Leu Asp Thr Asn Asp Asn Pro Pro Glu Leu Ile Val Ser Ser Phe  
 340 345 350  
 Ser Asn Ser Val Ala Glu Asn Ser Pro Glu Thr Pro Leu Ala Val Phe  
 355 360 365  
 Lys Ile Asn Asp Arg Asp Ser Gly Glu Asn Gly Lys Met Val Cys Tyr  
 370 375 380  
 Ile Gln Glu Asn Leu Pro Phe Leu Leu Lys Pro Ser Val Glu Asn Phe  
 385 390 395 400  
 Tyr Ile Leu Ile Thr Glu Gly Ala Leu Asp Arg Glu Ile Arg Ala Glu  
 405 410 415  
 Tyr Asn Ile Thr Ile Thr Val Thr Asp Leu Gly Thr Pro Arg Leu Lys  
 420 425 430  
 Thr Glu His Asn Ile Thr Val Leu Val Ser Asp Val Asn Asn Asn Ala  
 435 440 445  
 Pro Ala Phe Thr Gln Thr Ser Tyr Thr Leu Phe Val Arg Glu Asn Asn  
 450 455 460  
 Ser Pro Ala Leu His Ile Gly Ser Val Ser Ala Thr Asp Arg Asp Ser  
 465 470 475 480  
 Gly Thr Asn Ala Gln Val Thr Tyr Ser Leu Leu Pro Pro Gln Asp Pro  
 485 490 495  
 His Leu Pro Leu Ala Ser Leu Val Ser Ile Asn Ala Asp Asn Gly His  
 500 505 510  
 Leu Phe Ala Leu Arg Ser Leu Asp Tyr Glu Ala Leu Gln Ala Phe Glu  
 515 520 525  
 Phe Arg Val Gly Ala Thr Asp Arg Gly Ser Pro Ala Leu Asn Ser Glu  
 530 535 540  
 Ala Leu Gly Ala Arg Ala Gly Ala Gly Arg Gln Arg Gln Leu Ala Leu  
 545 550 555 560  
 Arg Ala Val Pro Ala Ala Glu Arg Leu Arg Ala Leu His Arg Ala Gly  
 565 570 575  
 Ala Pro Gly Gly Arg Ala Gly Leu Pro Gly Asp Gln Gly Gly Gly Gly  
 580 585 590  
 Gly Arg Arg Leu Gly Pro Glu Arg Leu Ala Val Val Pro Ala Ala Gln  
 595 600 605  
 Gly His Gly Ala Arg Ala Val Arg Cys Val Gly Ala Gln Trp Gly Gly  
 610 615 620  
 Ala His Arg Gln Ala Ala Glu Arg Ala Arg Arg Ser Gln Ala Gln Ala  
 625 630 635 640  
 Gly Gly Ala Cys Gln Gly Gln Trp Arg Ala Ser Ser Leu Gly His Arg

645                      650                      655  
 His Ala Ala Arg Ala Pro Gly Gly Arg Leu Leu Pro Ala Leu Pro Ala  
                     660                      665                      670  
 Ser Pro Gly Gly Gly Pro Gly Pro Gly Pro Gly Arg Leu Ala His Arg  
                     675                      680                      685  
 Leu Pro Gly Gly Gly Val Gly Leu Gly Val Phe Ala Leu Pro Pro Leu  
                     690                      695                      700  
 Gly Ala Pro Val Arg Gly Gly Ala Ala Val Gln Glu Glu Gln Gly Gly  
                     705                      710                      715                      720  
 Leu Gly Gly Ser Leu Leu Gly Ala Arg Gly Ser Phe Ser Arg Ala Ser  
                     725                      730                      735  
 Gly Gly Arg Glu Gly Arg Xaa  
                     740  
  
 <210> 166  
 <211> 214  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (214)  
 <223> Xaa equals stop translation  
  
 <400> 166  
 Met Asn Arg Met Glu Leu Leu Lys Leu Leu Leu Thr Cys Phe Ser Glu  
   1                    5                    10                    15  
 Ala Met Tyr Leu Pro Pro Ala Pro Glu Ser Gly Ser Thr Asn Pro Trp  
                     20                    25                    30  
 Val Gln Phe Phe Cys Ser Thr Glu Asn Arg His Ala Leu Pro Leu Phe  
                     35                    40                    45  
 Thr Ser Leu Leu Asn Thr Val Cys Ala Tyr Asp Pro Val Gly Tyr Gly  
                     50                    55                    60  
 Ile Pro Tyr Asn His Leu Leu Phe Ser Asp Tyr Arg Glu Pro Leu Val  
                     65                    70                    75                    80  
 Glu Glu Ala Ala Gln Val Leu Ile Val Thr Leu Asp His Asp Ser Ala  
                     85                    90                    95  
 Ser Ser Ala Ser Pro Thr Val Asp Gly Thr Thr Thr Gly Thr Ala Met  
                     100                    105                    110  
 Asp Asp Ala Asp Pro Pro Gly Pro Glu Asn Leu Phe Val Asn Tyr Leu  
                     115                    120                    125  
 Ser Arg Ile His Arg Glu Glu Asp Phe Gln Phe Ile Leu Lys Gly Ile  
                     130                    135                    140

Ala Arg Leu Leu Ser Asn Pro Leu Leu Gln Thr Tyr Leu Pro Asn Ser  
 145 150 155 160

Thr Lys Lys Asp Pro Val Pro Pro Gly Ala Ala Ser Ser Leu Leu Glu  
 165 170 175

Ala Leu Arg Leu Gln Gln Glu Ile Pro Leu Leu Arg Ala Glu Glu Gln  
 180 185 190

Arg Arg Pro Arg His Pro Cys Pro His Pro Leu Leu Pro Gln Arg Cys  
 195 200 205

Pro Gly Arg Ser Val Xaa  
 210

<210> 167  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (213)  
 <223> Xaa equals stop translation

<400> 167  
 Met Pro Ser Leu Arg Phe Leu Ala Leu Ala Leu Leu Leu Ala Ile Leu  
 1 5 10 15

Pro Ala Leu Pro Asn Ala His Ala Ala Pro Gly Ile Gly Gly Leu Ile  
 20 25 30

Gly Gly Gly Ser Gln Ala Ser Ala Lys Glu Glu Pro Gln Ser Asn Ala  
 35 40 45

Gln Pro Ser Ala Asp Glu Arg Lys Gln Arg Leu Leu Ser Gln Ala Glu  
 50 55 60

Glu Thr Arg Gln Arg Leu Thr Asp Leu Lys Ala Glu Leu Ala Gly Ala  
 65 70 75 80

Pro Lys Glu Ile Ser Glu Ala Gln Arg Thr Leu Ser Lys Leu Val Ser  
 85 90 95

Glu Asp Asn Ser Asp Leu Pro Glu Arg Leu Ser Lys Leu Ser Val Pro  
 100 105 110

Val Leu Glu Gln Arg Leu Ala Ala Arg Val Asp Glu Leu Ala Leu Trp  
 115 120 125

Gln Gln Ala Leu Ser Ala Ala Asn Ser Met Leu Ile Ser Ala Gln Thr  
 130 135 140

Arg Pro Glu Arg Ala Gln Ala Asp Ile Ser Lys Asn Gln Leu Arg Ile  
 145 150 155 160

Asp Glu Ile Asn Gly Leu Leu Lys Ser Gly Arg Glu Asn Asn Lys Pro  
 165 170 175

Leu Thr Asp Glu Arg Arg Ala Leu Leu Glu Ser Thr Ser Arg Ala Ala  
                   180                  185                  190

Ala Gly Pro Ser Ile Phe His Pro Gly Gly Val Pro Gly Lys Cys Thr  
                   195                  200                  205

Gln Phe Ala Leu Xaa  
                   210

<210> 168  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (75)  
 <223> Xaa equals stop translation

<400> 168  
 Met Phe Thr Ser Phe Gly Leu Ala Ser Pro Arg Ile Leu Phe Cys Phe  
   1                  5                  10                  15

Cys Phe Phe Asp Leu Gly Phe Ile Phe Phe Cys Val Leu Tyr Tyr Ile  
                   20                  25                  30

Val Lys Gly Ile Leu Ala Glu Thr Leu Val Phe Gly Ala Arg Gly Glu  
                   35                  40                  45

Gln Glu Cys Trp Ala Val Tyr Phe Arg Trp Arg Thr His Leu Gln Thr  
                   50                  55                  60

Phe Gly Leu Phe Ser Phe Asn Cys Ser Val Xaa  
   65                  70                  75

<210> 169  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (48)  
 <223> Xaa equals stop translation

<400> 169  
 Met Phe Leu Cys Leu Phe Phe Phe Phe Asn Ala Thr Gln Gly Asn  
   1                  5                  10                  15

Ile Phe Ile Ser Phe Leu Ser Gly Leu Pro Gln Cys Ile Phe Ile Ser  
                   20                  25                  30

Phe Glu Thr Lys Arg Phe Trp Lys Leu Phe Phe Cys Ser Phe Lys Xaa  
                   35                  40                  45

<210> 170  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (88)  
 <223> Xaa equals stop translation

<400> 170  
 Met Gly Leu His Leu Arg Pro Tyr Arg Val Gly Leu Leu Pro Asp Gly  
   1                  5                  10                  15  
 Leu Leu Phe Leu Leu Leu Leu Met Leu Leu Ala Asp Pro Ala Leu  
           20                  25                  30  
 Pro Ala Gly Arg His Pro Pro Val Val Leu Val Pro Gly Asp Leu Gly  
           35                  40                  45  
 Asn Gln Leu Glu Ala Lys Leu Asp Lys Pro Thr Val Val His Tyr Leu  
   50                  55                  60  
 Cys Ser Lys Lys Thr Glu Ser Tyr Phe Thr Ile Trp Leu Asn Leu Glu  
   65                  70                  75                  80  
 Leu Leu Leu Pro Val His His Xaa  
                   85

<210> 171  
 <211> 42  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (42)  
 <223> Xaa equals stop translation

<400> 171  
 Met Ala Cys Glu Thr His Gly Val Leu Val Pro Ala His Leu Ser Gly  
   1                  5                  10                  15  
 Leu Ile Thr Cys Leu Leu Ala Phe Trp Val Pro Ala Ser Cys Ile Gln  
           20                  25                  30  
 Arg Cys Ser Gly Ser Pro Leu Pro Leu Xaa  
   35                  40

<210> 172  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (48)  
 <223> Xaa equals stop translation  
  
 <400> 172  
 Met Gln Cys Phe Leu Phe Ser Ile Phe Leu Ile Thr Gly Leu Ala Glu  
   1                  5                  10                  15  
  
 Glu Phe Cys Glu Gln Leu Ser Ile Ser Leu Ala Glu Glu Glu Ile Gln  
           20                  25                  30  
  
 Leu Ser Ser Thr Val Glu His Phe Cys Met Thr Ala Phe Ser Trp Xaa  
       35                  40                  45

<210> 173  
 <211> 233  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (233)  
 <223> Xaa equals stop translation  
  
 <400> 173  
 Met Ala Ala Leu Ala Ala Ala Lys Lys Val Trp Ser Ala Arg Arg  
   1                  5                  10                  15  
  
 Leu Leu Val Leu Leu Phe Thr Pro Leu Ala Leu Leu Pro Val Val Phe  
           20                  25                  30  
  
 Ala Leu Pro Pro Lys Glu Gly Arg Cys Leu Phe Val Ile Leu Leu Met  
       35                  40                  45  
  
 Ala Val Tyr Trp Cys Thr Glu Ala Leu Pro Leu Ser Val Thr Ala Leu  
       50                  55                  60  
  
 Leu Pro Ile Val Leu Phe Pro Phe Met Gly Ile Leu Pro Ser Asn Lys  
       65                  70                  75                  80  
  
 Val Cys Pro Gln Tyr Phe Leu Asp Thr Asn Phe Leu Phe Leu Ser Gly  
           85                  90                  95  
  
 Leu Ile Met Ala Ser Ala Ile Glu Glu Trp Asn Leu His Arg Arg Ile  
       100                  105                  110  
  
 Ala Leu Lys Ile Leu Met Leu Val Gly Val Gln Pro Ala Arg Leu Ile  
       115                  120                  125  
  
 Leu Gly Met Met Val Thr Thr Ser Phe Leu Ser Met Trp Leu Ser Asn  
       130                  135                  140  
  
 Thr Ala Ser Thr Ala Met Met Leu Pro Ile Ala Asn Ala Ile Leu Lys  
       145                  150                  155                  160

```
<210> 174
<211> 45
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (45)
<223> Xaa equals stop translation
```

```

<400> 174
Met Gly Thr Ile Phe Gly Tyr Leu His Cys Val Lys Cys Tyr Val Leu
  1             5             10             15

Tyr Phe Ile Phe Ile Leu Ile Thr Ala Val Tyr His Ser Phe Tyr Tyr
      20             25             30

Pro His Tyr Arg Gly Lys Ala Leu Ile Ser Gly Thr Xaa
      35             40             45

```

```
<210> 175
<211> 85
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (85)
<223> Xaa equals stop translation
```

```

<400> 175
Met Val Trp Phe Leu Phe Leu Val Phe Ile Phe Leu Lys Val Lys Gly
  1             5             10             15
Asp Phe Phe Pro Pro Phe Leu Ile Cys Asn Leu Phe Cys Ile Trp Met
      20             25             30

```

Ile Thr Gly Val Ser His Arg Leu Gln Pro Gln Ile Leu Phe Ser Arg  
           35                          40                          45

His Lys His Asn Gln Glu Ile Ile Leu Gln Met Val Ser Phe Ser Cys  
           50                          55                          60

Cys Val Phe Phe Pro Met Ile Arg Glu Val Lys Ser Xaa Leu Gly Cys  
           65                          70                          75                          80

Ile Lys Met Ser Xaa  
                           85

<210> 176

<211> 66

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (66)

<223> Xaa equals stop translation

<400> 176

Met Trp Val Leu Leu Ser Cys Pro Leu Pro Pro Leu Cys Leu Pro Ala  
       1                          5                          10                          15

Ser Ala Val Pro Gly Gln Cys Leu Gly Gly Gln Trp Ser Gly His Gln  
           20                          25                          30

Leu Arg Leu Arg Gly Arg Gly Trp His Cys Arg Cys His Cys Arg Ala  
           35                          40                          45

Trp Ala Ala Asp Met Gly Arg Gly Leu His Ser Cys Gln Leu Leu Ser  
           50                          55                          60

Arg Xaa  
       65

<210> 177

<211> 55

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (55)

<223> Xaa equals stop translation

<400> 177

Met Leu Leu Leu Cys Ile Leu Leu Ile Phe Cys Val Val Gly Leu Ser  
       1                          5                          10                          15

Val Val Gly Arg Arg Val Leu Lys Ser Thr Thr Ile Ile Val Tyr Leu  
           20                          25                          30

Ser Ile Thr Pro Phe Ser Ser Phe Ser Ser Ile Ser His Ile Phe Gln

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<210> 179
<211> 330
<212> PRT
<213> Homo sapiens
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<220>  
<221> SITE  
<222> (38)  
<223> Xaa equals any of the naturally occurring L-amino acids
```

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<220>  
<221> SITE  
<222> (247)  
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<400> 179
Met Ser Pro Leu Ser Ala Ala Arg Ala Ala Leu Arg Val Tyr Ala Val
  1             5             10             15
```

Gly Ala Ala Val Ile Leu Ala Gln Leu Leu Arg Arg Cys Arg Gly Gly  
                   20                  25                  30  
 Phe Leu Glu Pro Val Xaa Pro Pro Arg Pro Asp Arg Val Ala Ile Val  
                   35                  40                  45  
 Thr Gly Gly Thr Asp Gly Ile Gly Tyr Ser Thr Ala Lys His Leu Ala  
                   50                  55                  60  
 Arg Leu Gly Met His Val Ile Ile Ala Gly Asn Asn Asp Ser Lys Ala  
                   65                  70                  75                  80  
 Lys Gln Val Val Ser Lys Ile Lys Glu Glu Thr Leu Asn Asp Lys Val  
                   85                  90                  95  
 Glu Phe Leu Tyr Cys Asp Leu Ala Ser Met Thr Ser Ile Arg Gln Phe  
                   100                  105                  110  
 Val Gln Lys Phe Lys Met Lys Lys Ile Pro Leu His Val Leu Ile Asn  
                   115                  120                  125  
 Asn Ala Gly Val Met Met Val Pro Gln Arg Lys Thr Arg Asp Gly Phe  
                   130                  135                  140  
 Glu Glu His Phe Gly Leu Asn Tyr Leu Gly His Phe Leu Leu Thr Asn  
                   145                  150                  155                  160  
 Leu Leu Leu Asp Thr Leu Lys Glu Ser Gly Ser Pro Gly His Ser Ala  
                   165                  170                  175  
 Arg Val Val Thr Val Ser Ser Ala Thr His Tyr Val Ala Glu Leu Asn  
                   180                  185                  190  
 Met Asp Asp Leu Gln Ser Ser Ala Cys Tyr Ser Pro His Ala Ala Tyr  
                   195                  200                  205  
 Ala Gln Ser Lys Leu Ala Leu Val Leu Phe Thr Tyr His Leu Gln Arg  
                   210                  215                  220  
 Leu Leu Ala Ala Glu Gly Ser His Val Thr Ala Asn Val Val Asp Pro  
                   225                  230                  235                  240  
 Gly Val Val Asn Thr Asp Xaa Tyr Lys His Val Phe Trp Ala Thr Arg  
                   245                  250                  255  
 Leu Ala Lys Lys Leu Leu Gly Trp Leu Leu Phe Lys Thr Pro Asp Glu  
                   260                  265                  270  
 Gly Ala Trp Thr Ser Ile Tyr Ala Ala Val Thr Pro Glu Leu Glu Gly  
                   275                  280                  285  
 Val Gly Gly Arg Tyr Leu Tyr Asn Glu Lys Glu Thr Lys Ser Leu His  
                   290                  295                  300  
 Val Thr Tyr Asn Gln Lys Leu Gln Gln Gln Leu Trp Ser Lys Ser Cys  
                   305                  310                  315                  320  
 Glu Met Thr Gly Val Leu Asp Val Thr Leu

325

330

<210> 180  
<211> 41  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> SITE  
<222> (41)  
<223> Xaa equals stop translation  
  
<400> 180  
Met Ile Ala Cys Gln Tyr Ile Ser Leu Ala Ile Met Leu Ala Phe Val  
1 5 10 15  
Arg Trp Ala Ala Phe Leu Leu Phe Pro Phe Leu Cys Gly Asp Asn Gly  
20 25 30  
Gly Asn Ile Gln Gln Lys Tyr Val Xaa  
35 40

<210> 181  
<211> 52  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> SITE  
<222> (52)  
<223> Xaa equals stop translation  
  
<400> 181  
Met Ala Asn Ala Met Ala Tyr Leu Ser Ile Phe Leu Cys Gly Ala Ser  
1 5 10 15  
Ser Ser Pro Cys Asp Cys Ala Leu Leu Val Pro Val Ser Leu Phe Arg  
20 25 30  
Gly Arg Lys Val Ala Asn Phe Lys Asn Gln Asn Ser Asp Val Thr Ser  
35 40 45  
Gly Asn Ala Xaa  
50

<210> 182  
<211> 55  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> SITE  
<222> (55)  
<223> Xaa equals stop translation  
  
<400> 182

Met Gln Gln Ile Cys Ser Cys Leu Gly Ala Phe Ala Leu Leu Phe Phe  
 1 5 10 15  
 Trp Pro Gly His Phe Thr Ser Thr Phe Ser Ile Phe Tyr Asp Phe Leu  
 20 25 30  
 Pro Ile Phe Gly Ser Leu Phe Lys Cys His Pro Ser Lys Arg Pro Ser  
 35 40 45  
 Lys Leu Pro Tyr Leu Lys Xaa  
 50 55

<210> 183  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (62)  
 <223> Xaa equals stop translation

<400> 183  
 Met Arg Leu Leu Leu Glu Trp Arg Val Tyr Leu Arg Leu Thr Cys Ala  
 1 5 10 15  
 Thr Lys Asp Gly Met Ala Arg Glu Cys Pro Thr Thr Trp Leu Ser Pro  
 20 25 30  
 Pro Ala Lys Pro Asp Phe Ala Gln Arg His Ser Val Lys Pro Thr Ala  
 35 40 45  
 Leu Gln Gly Gly Arg Trp Ser Arg Leu Gly Ala Ser Pro Xaa  
 50 55 60

<210> 184  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (148)  
 <223> Xaa equals stop translation

<400> 184  
 Met Leu Gly Leu Pro Trp Lys Gly Gly Leu Ser Trp Ala Leu Leu Leu  
 1 5 10 15  
 Leu Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp His Phe His  
 20 25 30  
 Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg Tyr Leu Pro  
 35 40 45  
 Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln Gln Ser Lys Asp  
 50 55 60

Tyr Tyr Ala Tyr Arg Leu Gly His Ile Leu Asn Ser Trp Lys Glu Gln  
 65 70 75 80  
 Val Glu Ser Lys Thr Val Phe Ser Met Glu Leu Leu Leu Gly Arg Thr  
 85 90 95  
 Arg Cys Gly Lys Phe Glu Asp Asp Ile Asp Asn Cys His Phe Gln Glu  
 100 105 110  
 Ser Thr Glu Leu Asn Asn Thr Phe Thr Cys Phe Phe Thr Ile Ser Thr  
 115 120 125  
 Arg Pro Trp Met Thr Gln Phe Ser Leu Leu Asn Lys Thr Cys Leu Glu  
 130 135 140  
 Gly Phe His Xaa  
 145

<210> 185  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (146)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (151)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (161)  
 <223> Xaa equals stop translation

<400> 185  
 Met Arg Leu Leu Cys Gly Leu Trp Leu Trp Leu Ser Leu Leu Lys Val  
 1 5 10 15  
 Leu Gln Ala Gln Thr Pro Thr Pro Leu Pro Leu Pro Pro Pro Met Gln  
 20 25 30  
 Ser Phe Gln Gly Asn Gln Phe Gln Gly Glu Trp Phe Val Leu Gly Leu  
 35 40 45  
 Ala Gly Asn Ser Phe Arg Pro Glu His Arg Ala Leu Leu Asn Ala Phe  
 50 55 60  
 Thr Ala Thr Phe Glu Leu Ser Asp Asp Gly Arg Phe Glu Val Trp Asn  
 65 70 75 80  
 Ala Met Thr Arg Gly Gln His Cys Asp Thr Trp Ser Tyr Val Leu Ile  
 85 90 95

131

Pro Ala Ala Gln Pro Gly Gln Phe Thr Val Asp His Gly Val Gly Arg  
 100 105 110

Ser Trp Leu Leu Pro Pro Gly Thr Leu Asp Gln Phe Ile Cys Leu Gly  
 115 120 125

Arg Ala Gln Gly Leu Ser Asp Asp Asn Ile Val Phe Pro Asp Val Thr  
 130 135 140

Gly Xaa Ala Leu Asp Leu Xaa Ser Leu Pro Trp Val Ala Ala Pro Ala  
 145 150 155 160

Xaa

<210> 186  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (122)  
 <223> Xaa equals stop translation

<400> 186  
 Met Met Leu Pro Gln Trp Leu Leu Leu Leu Phe Leu Leu Phe Phe Phe  
 1 5 10 15

Leu Phe Leu Leu Thr Arg Gly Ser Leu Ser Pro Thr Lys Tyr Asn Leu  
 20 25 30

Leu Glu Leu Lys Glu Ser Cys Ile Arg Asn Gln Asp Cys Glu Thr Gly  
 35 40 45

Cys Cys Gln Arg Ala Pro Asp Asn Cys Glu Ser His Cys Ala Glu Lys  
 50 55 60

Gly Ser Glu Gly Ser Leu Cys Gln Thr Gln Val Phe Phe Gly Gln Tyr  
 65 70 75 80

Arg Ala Cys Pro Cys Leu Arg Asn Leu Thr Cys Ile Tyr Ser Lys Asn  
 85 90 95

Glu Lys Trp Leu Ser Ile Ala Tyr Gly Arg Cys Gln Lys Ile Gly Arg  
 100 105 110

Gln Lys Leu Ala Lys Lys Met Phe Phe Xaa  
 115 120

<210> 187  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE

&lt;222&gt; (163)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 187

Met Thr Ser Asn Phe Pro Phe Cys Thr Leu Ile Leu Gly Ile Ala Gln  
 1 5 10 15

Ala Gln Ala Cys Pro Gly Cys Pro Gly Asp Trp Pro Gly Leu Gly Ser  
 20 25 30

Gly Val Gly Glu Gly Leu His His Ile Arg Thr Cys Arg Thr Pro Ile  
 35 40 45

Pro Cys Ser Pro Pro Ala Pro Ala Ala Ala Cys Leu Gly Ser Gly His  
 50 55 60

Ala Arg Leu Pro Cys Val Leu Arg Leu Trp Pro Val Pro Ala Asn Leu  
 65 70 75 80

Ser Ser Pro Phe Arg Leu Glu Ala Leu His Cys Ser Phe Trp Ser Ser  
 85 90 95

Pro Leu Leu Pro Ala Pro His Leu Ala Phe Phe Gly Phe Arg Asp Leu  
 100 105 110

Leu Thr Asp Phe Leu Leu Ala Ala Cys Leu Leu Thr Phe Gln Lys Thr  
 115 120 125

Pro Leu Glu Leu Pro Met Ala Val Val His Leu Leu Val Ala Thr Pro  
 130 135 140

Cys Tyr Gln Met Leu Asp Asn Leu Pro Leu Pro Ser Ala Ala Ala Asn  
 145 150 155 160

Trp Cys Xaa

&lt;210&gt; 188

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (51)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 188

Met Pro Gly Ile Leu Ala Gly Ile Pro Val Lys Asp Leu Cys Leu Ser  
 1 5 10 15

Leu Leu Gln Gly Phe Arg Leu Leu Leu Leu Cys Val Cys Pro Gly Trp  
 20 25 30

Leu Ser Gly Trp Met Gly Gly Gln Lys Gly Ser Pro Arg Ile Val Asp  
 35 40 45

Ile Gly Xaa

50

<210> 189  
<211> 65  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (65)  
<223> Xaa equals stop translation

<400> 189  
Met Tyr Leu Tyr Leu Gly Val Phe Phe His Leu Ile Tyr Pro Gly Ala  
1 5 10 15

Leu Ser Ile Thr Thr Leu Gly Lys His Ser His Pro Phe Phe Thr Ala  
20 25 30

Glu Gln Asn Ser Thr Val Trp Met Glu His Thr Leu Phe His Gln Ser  
35 40 45

Pro Val Ala Ser His Leu Val Cys Phe Gln Ser Phe Ala Phe Ser Glu  
50 55 60

Xaa  
65

<210> 190  
<211> 47  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (47)  
<223> Xaa equals stop translation

<400> 190  
Met Thr Leu Ser Leu Gln Leu Ala Glu Leu Val His Phe Val Cys Ala  
1 5 10 15

Phe Gln Ser Gln Trp Thr Gly Val Tyr Pro Met Met Pro Pro Leu Lys  
20 25 30

Pro Thr Glu Pro Leu Cys Phe Ala Cys Val Pro Cys Arg Val Xaa  
35 40 45

<210> 191  
<211> 144  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (144)

<223> Xaa equals stop translation

<400> 191

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Met Ser Pro Phe His Leu Leu Gly Leu Lys Val Phe Leu Thr Trp Ala
 1           5           10           15
Leu Thr Leu Ala Gln Ile Cys Leu Tyr Phe Phe Glu Val Gln Pro Leu
          20           25           30
Gly Leu Leu Ala Leu Asn Phe Phe Cys Thr Ala Thr Ala Gly Leu Lys
          35           40           45
Glu Leu Cys Met His Pro Pro Ser Leu Ala Phe Thr Pro Glu Phe His
          50           55           60
Thr Ser Leu Ser Pro Leu Ala Ile Pro Ser Phe Cys Gly Thr Ser Val
          65           70           75           80
Ser Leu Ser Asn Ser His Thr Ile Pro Leu Ser Leu Tyr Leu Pro Phe
          85           90           95
Pro Ser Lys Ser Arg Met Pro Asp Thr Leu His Leu Leu Val His Ser
          100          105          110
Leu Pro Leu Val His Ser Gln Val Leu Pro Val Lys Asp Val Thr Ile
          115          120          125
Glu Trp Pro Leu Cys Gln Arg Cys Leu Gly Ser Thr Cys His Gln Xaa
          130          135          140

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<210> 192

<211> 81

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (76)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 192

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Met Phe Cys Phe Ser Ser Ile Phe Cys Ser His Glu His Thr His Leu
 1           5           10           15
Pro Gly Thr Phe Trp Leu Phe Leu Phe Leu Phe Leu Ile Leu Pro Pro
          20           25           30
Ser Cys Pro Cys Phe Leu Pro Phe Ser Leu Ala Ile Glu Thr Val Arg
          35           40           45

```

135

Trp Pro Cys Trp His His Pro Thr Ser Phe Glu Leu Cys Tyr Pro Gly  
50 55 60

Thr Ser Ile Tyr Tyr Ala Ser Arg Gly Gly Pro Xaa Pro Asn Ser Glu  
65 70 75 80

Xaa

<210> 193  
<211> 45  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (45)  
<223> Xaa equals stop translation

<400> 193  
Met Thr Tyr Leu Phe Cys Ser Ser Ile Ser Leu Leu Leu Leu Lys Val  
1 5 10 15

His Ser Ser Gly His Gln Asp Ile Arg Lys Ala Lys Ser Lys Val Pro  
20 25 30

Arg Leu Leu Ile Ile Gln Cys Pro Gln Gln Arg Glu Xaa  
35 40 45

<210> 194  
<211> 42  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (42)  
<223> Xaa equals stop translation

<400> 194  
Met Pro Thr Ile Trp Val Lys Leu Cys Leu Leu Gln Val Cys His Gly  
1 5 10 15

Leu Phe Pro Leu Leu Lys His Trp Ser Gln Pro Met Pro Leu Cys Val  
20 25 30

Thr Leu Ala Pro Val Ser Tyr Trp Leu Xaa  
35 40

<210> 195  
<211> 260  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE

&lt;222&gt; (260)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 195

Met Gly Thr Ala Ala Leu Gly Pro Val Trp Ala Ala Leu Leu Leu Phe  
 1 5 10 15

Leu Leu Met Cys Glu Ile Pro Met Val Glu Leu Thr Phe Asp Arg Ala  
 20 25 30

Val Ala Ser Asp Cys Gln Arg Cys Cys Asp Ser Glu Asp Pro Leu Asp  
 35 40 45

Pro Ala His Val Ser Ser Ala Ser Ser Ser Gly Arg Pro His Ala Leu  
 50 55 60

Pro Glu Ile Arg Pro Tyr Ile Asn Ile Thr Ile Leu Lys Gly Asp Lys  
 65 70 75 80

Gly Asp Pro Gly Pro Met Gly Leu Pro Gly Tyr Met Gly Arg Glu Gly  
 85 90 95

Pro Gln Gly Glu Pro Gly Pro Gln Gly Ser Lys Gly Asp Lys Gly Glu  
 100 105 110

Met Gly Ser Pro Gly Ala Pro Cys Gln Lys Arg Phe Phe Ala Phe Ser  
 115 120 125

Val Gly Arg Lys Thr Ala Leu His Ser Gly Glu Asp Phe Gln Thr Leu  
 130 135 140

Leu Phe Glu Arg Val Phe Val Asn Leu Asp Gly Cys Phe Asp Met Ala  
 145 150 155 160

Thr Gly Gln Phe Ala Ala Pro Leu Arg Gly Ile Tyr Phe Phe Ser Leu  
 165 170 175

Asn Val His Ser Trp Asn Tyr Lys Glu Thr Tyr Val His Ile Met His  
 180 185 190

Asn Gln Lys Glu Ala Val Ile Leu Tyr Ala Gln Pro Ser Glu Arg Ser  
 195 200 205

Ile Met Gln Ser Gln Ser Val Met Leu Asp Leu Ala Tyr Gly Asp Arg  
 210 215 220

Val Trp Val Arg Leu Phe Lys Arg Gln Arg Glu Asn Ala Ile Tyr Ser  
 225 230 235 240

Asn Asp Phe Asp Thr Tyr Ile Thr Phe Ser Gly His Leu Ile Lys Ala  
 245 250 255

Glu Asp Asp Xaa  
 260

&lt;210&gt; 196

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 196

Met Leu Gly His Cys Cys Tyr Phe Trp Gln Val Trp Pro Ala Ser Glu  
 1 5 10 15

Ala Leu Ala Ala Gly Pro Thr Pro Ser Thr Gly Ser Ser Ser Pro Ser  
 20 25 30

Trp Lys Gln His Ile Gly Thr Ser Leu Gln Lys Thr Arg Gly Ser Leu  
 35 40 45

Pro Thr Thr Thr Leu Thr Ser Gly Ala Gly Gln Ser Thr Ser Thr Gly  
 50 55 60

Lys Asn Pro Ala Ala Gly Arg Ser Leu Glu Gly Ala Leu Pro Ala Gly  
 65 70 75 80

Val Trp Pro Cys Phe Ala Gln Ser Pro Cys Thr Gly Gly Gln Gln Thr  
 85 90 95

Pro Ser Ser Thr Gly Leu Arg Ser Cys Leu Val Arg Ser Pro Ala Thr  
 100 105 110

Trp Trp Arg Thr Pro  
 115

&lt;210&gt; 197

&lt;211&gt; 698

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 197

Met Leu Pro Ala Arg Leu Pro Phe Arg Leu Leu Ser Leu Phe Leu Arg  
 1 5 10 15

Gly Ser Ala Pro Thr Ala Ala Arg His Gly Leu Arg Glu Pro Leu Leu  
 20 25 30

Glu Arg Arg Cys Ala Ala Ala Ser Ser Phe Gln His Ser Ser Ser Leu  
 35 40 45

Gly Arg Glu Leu Pro Tyr Asp Pro Val Asp Thr Glu Gly Phe Gly Glu  
 50 55 60

Gly Gly Asp Met Gln Glu Arg Phe Leu Phe Pro Glu Tyr Ile Leu Asp  
 65 70 75 80

Pro Glu Pro Gln Pro Thr Arg Glu Lys Gln Leu Gln Glu Leu Gln Gln  
 85 90 95

Gln Gln Glu Glu Glu Glu Arg Gln Arg Gln Gln Arg Arg Glu Glu Arg  
 100 105 110

Arg Gln Gln Asn Leu Arg Ala Arg Ser Arg Glu His Pro Val Val Gly  
 115 120 125

His Pro Asp Pro Ala Leu Pro Pro Ser Gly Val Asn Cys Ser Gly Cys

130	135	140
Gly Ala Glu Leu His Cys Gln Asp Ala Gly Val Pro Gly Tyr Leu Pro		
145	150	155 160
Arg Glu Lys Phe Leu Arg Thr Ala Glu Ala Asp Gly Gly Leu Ala Arg		
	165	170 175
Thr Val Cys Gln Arg Cys Trp Leu Leu Ser His His Arg Arg Ala Leu		
	180	185 190
Arg Leu Gln Val Ser Arg Glu Gln Tyr Leu Glu Leu Val Ser Ala Ala		
	195	200 205
Leu Arg Arg Pro Gly Pro Ser Leu Val Leu Tyr Met Val Asp Leu Leu		
	210	215 220
Asp Leu Pro Asp Ala Leu Leu Pro Asp Leu Pro Ala Leu Val Gly Pro		
	225	230 235 240
Lys Gln Leu Ile Val Leu Gly Asn Lys Val Asp Leu Leu Pro Gln Asp		
	245	250 255
Ala Pro Gly Tyr Arg Gln Arg Leu Arg Glu Arg Leu Trp Glu Asp Cys		
	260	265 270
Ala Arg Ala Gly Leu Leu Leu Ala Pro Gly His Gln Gly Pro Gln Arg		
	275	280 285
Pro Val Lys Asp Glu Pro Gln Asp Gly Glu Asn Pro Asn Pro Pro Asn		
	290	295 300
Trp Ser Arg Thr Val Val Arg Asp Val Arg Leu Ile Ser Ala Lys Thr		
305	310	315 320
Gly Tyr Gly Val Glu Glu Leu Ile Ser Ala Leu Gln Arg Ser Trp Arg		
	325	330 335
Tyr Arg Gly Asp Val Tyr Leu Val Gly Ala Thr Asn Ala Gly Lys Ser		
	340	345 350
Thr Leu Phe Asn Thr Leu Leu Glu Ser Asp Tyr Cys Thr Ala Lys Gly		
	355	360 365
Ser Asp Ala Ile Asp Arg Ala Thr Ile Ser Pro Trp Pro Gly Thr Thr		
	370	375 380
Leu Asn Leu Leu Lys Phe Pro Ile Cys Asn Pro Thr Pro Tyr Arg Met		
385	390	395 400
Phe Lys Arg His Gln Arg Leu Lys Lys Asp Ser Thr Gln Ala Glu Glu		
	405	410 415
Asp Leu Ser Glu Gln Glu Gln Asn Gln Leu Asn Val Leu Lys Lys His		
	420	425 430
Gly Tyr Val Val Gly Arg Val Gly Arg Thr Phe Leu Tyr Ser Glu Glu		
	435	440 445

Gln Lys Asp Asn Ile Pro Phe Glu Phe Asp Ala Asp Ser Leu Ala Phe  
 450 455 460  
 Asp Met Glu Asn Asp Pro Val Met Gly Thr His Lys Ser Thr Lys Gln  
 465 470 475 480  
 Val Glu Leu Thr Ala Gln Asp Val Lys Asp Ala His Trp Phe Tyr Asp  
 485 490 495  
 Thr Pro Gly Ile Thr Lys Glu Asn Cys Ile Leu Asn Leu Leu Thr Glu  
 500 505 510  
 Lys Glu Val Asn Ile Val Leu Pro Thr Gln Ser Ile Val Pro Arg Thr  
 515 520 525  
 Phe Val Leu Lys Pro Gly Met Val Leu Phe Leu Gly Ala Ile Gly Arg  
 530 535 540  
 Ile Asp Phe Leu Gln Gly Asn Gln Ser Ala Trp Phe Thr Val Val Ala  
 545 550 555 560  
 Ser Asn Ile Leu Pro Val His Ile Thr Ser Leu Asp Arg Ala Asp Ala  
 565 570 575  
 Leu Tyr Gln Lys His Ala Gly His Thr Leu Leu Gln Ile Pro Met Gly  
 580 585 590  
 Gly Lys Glu Arg Met Ala Gly Phe Pro Pro Leu Val Ala Glu Asp Ile  
 595 600 605  
 Met Leu Lys Glu Gly Leu Gly Ala Ser Glu Ala Val Ala Asp Ile Lys  
 610 615 620  
 Phe Ser Ser Ala Gly Trp Val Ser Val Thr Pro Asn Phe Lys Asp Arg  
 625 630 635 640  
 Leu His Leu Arg Gly Tyr Thr Pro Glu Gly Thr Val Leu Thr Val Arg  
 645 650 655  
 Pro Pro Leu Leu Pro Tyr Ile Val Asn Ile Lys Gly Gln Arg Ile Lys  
 660 665 670  
 Lys Ser Val Ala Tyr Lys Thr Lys Lys Pro Pro Ser Leu Met Tyr Asn  
 675 680 685  
 Val Arg Lys Lys Lys Gly Lys Ile Asn Val  
 690 695  
  
 <210> 198  
 <211> 348  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 198  
 Met Asn Met Thr Gln Ala Arg Val Leu Val Ala Ala Val Val Gly Leu  
 1 5 10 15  
 Val Ala Val Leu Leu Tyr Ala Ser Ile His Lys Ile Glu Glu Gly His

140

20					25					30					
Leu	Ala	Val	Tyr	Tyr	Arg	Gly	Gly	Ala	Leu	Leu	Thr	Ser	Pro	Ser	Gly
		35					40					45			
Pro	Gly	Tyr	His	Ile	Met	Leu	Pro	Phe	Ile	Thr	Thr	Phe	Arg	Ser	Val
		50				55					60				
Gln	Thr	Thr	Leu	Gln	Thr	Asp	Glu	Val	Lys	Asn	Val	Pro	Cys	Gly	Thr
	65				70					75					80
Ser	Gly	Gly	Val	Met	Ile	Tyr	Ile	Asp	Arg	Ile	Glu	Val	Val	Asn	Met
				85					90					95	
Leu	Ala	Pro	Tyr	Ala	Val	Phe	Asp	Ile	Val	Arg	Asn	Tyr	Thr	Ala	Asp
		100						105					110		
Tyr	Asp	Lys	Thr	Leu	Ile	Phe	Asn	Lys	Ile	His	His	Glu	Leu	Asn	Gln
		115					120					125			
Phe	Cys	Ser	Ala	His	Thr	Leu	Gln	Glu	Val	Tyr	Ile	Glu	Leu	Phe	Asp
	130					135					140				
Gln	Ile	Asp	Glu	Asn	Leu	Lys	Gln	Ala	Leu	Gln	Lys	Asp	Leu	Asn	Leu
	145				150					155					160
Met	Ala	Pro	Gly	Leu	Thr	Ile	Gln	Ala	Val	Arg	Val	Thr	Lys	Pro	Lys
			165						170					175	
Ile	Pro	Glu	Ala	Ile	Arg	Arg	Asn	Phe	Glu	Leu	Met	Glu	Ala	Glu	Lys
		180						185					190		
Thr	Lys	Leu	Leu	Ile	Ala	Ala	Gln	Lys	Gln	Lys	Val	Val	Glu	Lys	Glu
		195					200						205		
Ala	Glu	Thr	Glu	Arg	Lys	Lys	Ala	Val	Ile	Glu	Ala	Glu	Lys	Ile	Ala
	210					215					220				
Gln	Val	Ala	Lys	Ile	Arg	Phe	Gln	Gln	Lys	Val	Met	Glu	Lys	Glu	Thr
	225				230					235					240
Glu	Lys	Arg	Ile	Ser	Glu	Ile	Glu	Asp	Ala	Ala	Phe	Leu	Ala	Arg	Glu
			245					250						255	
Lys	Ala	Lys	Ala	Asp	Ala	Glu	Tyr	Tyr	Ala	Ala	His	Lys	Tyr	Ala	Thr
		260						265					270		
Ser	Asn	Lys	His	Lys	Leu	Thr	Pro	Glu	Tyr	Leu	Glu	Leu	Lys	Lys	Tyr
		275					280					285			
Gln	Ala	Ile	Ala	Ser	Asn	Ser	Lys	Ile	Tyr	Phe	Gly	Ser	Asn	Ile	Pro
	290					295					300				
Asn	Met	Phe	Val	Asp	Ser	Ser	Cys	Ala	Leu	Lys	Tyr	Ser	Asp	Ile	Arg
	305				310					315				320	
Thr	Gly	Arg	Glu	Ser	Ser	Leu	Pro	Ser	Lys	Glu	Ala	Leu	Glu	Pro	Ser
			325						330					335	

141

Gly Glu Asn Val Ile Gln Asn Lys Glu Ser Thr Gly  
 340 345

&lt;210&gt; 199

&lt;211&gt; 401

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (307)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 199

Met Met Gly Leu Gly Asn Gly Arg Arg Ser Met Lys Ser Pro Pro Leu  
 1 5 10 15

Val Leu Ala Ala Leu Val Ala Cys Ile Ile Val Leu Gly Phe Asn Tyr  
 20 25 30

Trp Ile Ala Ser Ser Arg Ser Val Asp Leu Gln Thr Arg Ile Met Glu  
 35 40 45

Leu Glu Gly Arg Val Arg Arg Arg Ala Ala Glu Arg Gly Ala Val Glu  
 50 55 60

Leu Lys Lys Asn Glu Phe Gln Gly Glu Leu Glu Lys Gln Arg Glu Gln  
 65 70 75 80

Leu Asp Lys Ile Gln Ser Ser His Asn Phe Gln Leu Glu Ser Val Asn  
 85 90 95

Lys Leu Tyr Gln Asp Glu Lys Ala Val Leu Val Asn Asn Ile Thr Thr  
 100 105 110

Gly Glu Arg Leu Ile Arg Val Leu Gln Asp Gln Leu Lys Thr Leu Gln  
 115 120 125

Arg Asn Tyr Gly Arg Leu Gln Gln Asp Val Leu Gln Phe Gln Lys Asn  
 130 135 140

Gln Thr Asn Leu Glu Arg Lys Phe Ser Tyr Asp Leu Ser Gln Cys Ile  
 145 150 155 160

Asn Gln Met Lys Glu Val Lys Glu Gln Cys Glu Glu Arg Ile Glu Glu  
 165 170 175

Val Thr Lys Lys Gly Asn Glu Ala Val Ala Ser Arg Asp Leu Ser Glu  
 180 185 190

Asn Asn Asp Gln Arg Gln Gln Leu Gln Ala Leu Ser Glu Pro Gln Pro  
 195 200 205

Arg Leu Gln Ala Ala Gly Leu Pro His Thr Glu Val Pro Gln Gly Lys  
 210 215 220

Gly Asn Val Leu Gly Asn Ser Lys Ser Gln Thr Pro Ala Pro Ser Ser  
 225 230 235 240

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<210> 200
<211> 324
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 200
Met Glu Xaa Ala Lys Val Tyr Val Ala Lys Val Asp Cys Thr Ala His
 1              5              10              15

Ser Asp Val Cys Ser Ala Gln Gly Val Arg Gly Tyr Pro Thr Leu Lys
      20              25              30

Leu Phe Lys Pro Gly Gln Glu Ala Val Lys Tyr Gln Gly Pro Arg Asp
      35              40              45

Phe Gln Thr Leu Glu Asn Trp Met Leu Gln Thr Leu Asn Glu Glu Pro
      50              55              60

Val Thr Pro Glu Pro Glu Val Glu Pro Pro Ser Ala Pro Glu Leu Lys

```

```
<210> 201
<211> 90
<212> PRT
<213> Homo sapiens
```

```
<400> 201  
Met Ala Leu Phe Ser Cys Leu Leu Leu Lys Gln Ser Asp Gly Ala  
      1           5             10            15
```

Ser Pro Val Leu Arg Ala Leu Ala Ala Ser Cys Leu Ala Ser Pro Ala  
 20 25 30  
 Gly Cys Cys Gly Thr Arg Lys Ala Leu Asn Gly Asn Val Gly Glu Lys  
 35 40 45  
 Val Gly Phe Thr Phe Met Ser Phe Gln Gly Cys Asp Pro Ser Ser Pro  
 50 55 60  
 Gly Cys Leu Cys Cys Ser Leu Leu Pro Ser Asn Ser Gln Leu Val Phe  
 65 70 75 80  
 Ile Ser Phe Leu Val Leu Ser Gly Leu Ala  
 85 90

<210> 202  
 <211> 243  
 <212> PRT  
 <213> Homo sapiens

<400> 202  
 Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu Arg Gly Leu  
 1 5 10 15  
 Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser Ala Ser Glu  
 20 25 30  
 Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg Glu Val Val  
 35 40 45  
 Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro Gly  
 50 55 60  
 Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly Ile  
 65 70 75 80  
 Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg Glu  
 85 90 95  
 Ser Phe Glu Glu Ser Trp Thr Pro Asn Tyr Lys Gln Cys Ser Trp Ser  
 100 105 110  
 Ser Leu Asn Tyr Gly Ile Asp Leu Gly Lys Ile Ala Glu Cys Thr Phe  
 115 120 125  
 Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe Ser Gly Ser  
 130 135 140  
 Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Glu Arg Trp Tyr Phe Thr  
 145 150 155 160  
 Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile Ile  
 165 170 175  
 Tyr Leu Asp Gln Gly Ser Pro Glu Met Asn Ser Thr Ile Asn Ile His  
 180 185 190

145

Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly Leu  
 195 200 205

Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys Gly  
 210 215 220

Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile Ile Glu Glu  
 225 230 235 240

Leu Pro Lys

<210> 203  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 203  
 Met Ala Gly Gln Glu Asp Pro Val Gln Arg Glu Ile His Gln Asp Trp  
 1 5 10 15

Ala Asn Arg Glu Tyr Ile Glu Ile Ile Thr Ser Ser Ile Lys Lys Ile  
 20 25 30

Ala Asp Phe Leu Asn Ser Phe Asp Met Ser Cys Arg Ser Arg Leu Ala  
 35 40 45

Thr Leu Asn Glu Lys Leu Thr Ala Leu Glu Arg Arg Ile Glu Tyr Ile  
 50 55 60

Glu Ala Arg Val Thr Lys Gly Glu Thr Leu Thr  
 65 70 75

<210> 204  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (185)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 204  
 Met Thr Ser Gln Pro Val Pro Asn Glu Thr Ile Ile Val Leu Pro Ser  
 1 5 10 15

Asn Val Ile Asn Phe Ser Gln Ala Glu Lys Pro Glu Pro Thr Asn Gln  
 20 25 30

Gly Gln Asp Ser Leu Lys Lys His Leu His Ala Glu Ile Lys Val Ile  
 35 40 45

Gly Thr Ile Gln Ile Leu Cys Gly Met Met Val Leu Ser Leu Gly Ile  
 50 55 60

Ile Leu Ala Ser Ala Ser Phe Ser Pro Asn Phe Thr Gln Val Thr Ser

146

65		70		75		80									
Thr	Leu	Leu	Asn	Ser	Ala	Tyr	Pro	Phe	Ile	Gly	Pro	Phe	Phe	Phe	Ile
				85					90					95	
Ile	Ser	Gly	Ser	Leu	Ser	Ile	Ala	Thr	Glu	Lys	Arg	Leu	Thr	Lys	Leu
			100					105					110		
Leu	Val	His	Ser	Ser	Leu	Val	Gly	Ser	Ile	Leu	Ser	Ala	Leu	Ser	Ala
		115					120					125			
Leu	Val	Gly	Phe	Ile	Ile	Leu	Ser	Val	Lys	Gln	Ala	Thr	Leu	Asn	Pro
	130					135					140				
Ala	Ser	Leu	Gln	Cys	Glu	Leu	Asp	Lys	Asn	Asn	Ile	Pro	Thr	Arg	Ser
145					150					155					160
Tyr	Val	Ser	Tyr	Phe	Tyr	His	Asp	Ser	Leu	Tyr	Thr	Thr	Asp	Cys	Tyr
				165					170					175	
Thr	Ala	Lys	Ala	Ser	Leu	Ala	Gly	Xaa	Leu	Ser	Leu	Met	Leu	Ile	Cys
			180					185					190		
Thr	Leu	Leu	Glu	Phe	Cys	Leu	Ala	Val	Leu	Thr	Ala	Val	Leu	Arg	Trp
		195					200					205			
Lys	Gln	Ala	Tyr	Ser	Asp	Phe	Pro	Gly	Ser	Val	Leu	Phe	Leu	Pro	His
	210					215					220				
Ser	Tyr	Ile	Gly	Asn	Ser	Gly	Met	Ser	Ser	Lys	Met	Thr	His	Asp	Cys
225				230						235					240
Gly	Tyr	Glu	Glu	Leu	Leu	Thr	Ser								
				245											

&lt;210&gt; 205

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 205

Met	Pro	Leu	Leu	Arg	Gly	Leu	Leu	Trp	Leu	Gln	Val	Leu	Cys	Ala	Gly
1				5				10						15	

Pro	Leu	His	Thr	Glu	Ala	Val	Val	Leu	Leu	Val	Pro	Ser	Asp	Asp	Gly
		20						25					30		

Arg	Ala	Phe	Leu	Leu	Arg	Ser	Arg	Leu	Leu	His	Pro	Glu	Ala	His	Val
	35						40					45			

Pro	Pro	Ala	Ala	Asp	Arg	Gly	Ala	Ser	Leu	Gln	Cys	Val	Leu	His	Gln
	50					55					60				

147

Ala Ala Pro Lys Ser Arg Pro Arg Ser Pro Ala Ala Gly Ala Ala Leu  
 65 70 75 80

Leu His Xaa Pro Arg Arg Thr Gly Asp Glu Pro Cys Arg Glu Phe His  
 85 90 95

Gly Asn Gly Phe Pro Gly Pro Thr Gln Leu Thr Pro Gly Glu Cys Gly  
 100 105 110

Leu Pro Ala Pro Ser Ser Leu Leu Gln His Ala Ser Ala Pro Val Arg  
 115 120 125

Thr Gly Ser Glu Gly Gln Val Val Gly Cys Pro Arg Ala Arg Gly Glu  
 130 135 140

Thr Gly Glu Gly Leu Ser Leu Ala Phe Leu Ser Ser Leu Met Phe Thr  
 145 150 155 160

Ser Arg Asn Gly Leu Val Gly Cys  
 165

<210> 206  
 <211> 218  
 <212> PRT  
 <213> Homo sapiens

<400> 206  
 Met Gly Ser Ala Ala Leu Glu Ile Leu Gly Leu Val Leu Cys Leu Val  
 1 5 10 15

Gly Trp Gly Gly Leu Ile Leu Ala Cys Gly Leu Pro Met Trp Gln Val  
 20 25 30

Thr Ala Phe Leu Asp His Asn Ile Val Thr Ala Gln Thr Thr Trp Lys  
 35 40 45

Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr Gly His Met Gln Cys  
 50 55 60

Lys Val Tyr Asp Ser Val Leu Ala Leu Ser Thr Glu Val Gln Ala Ala  
 65 70 75 80

Arg Ala Leu Thr Val Ser Ala Val Leu Leu Ala Phe Val Ala Leu Phe  
 85 90 95

Val Thr Leu Ala Gly Ala Gln Cys Thr Thr Cys Val Ala Pro Gly Pro  
 100 105 110

Ala Lys Ala Arg Val Ala Leu Thr Gly Gly Val Leu Tyr Leu Phe Cys  
 115 120 125

Gly Leu Leu Ala Leu Val Pro Leu Cys Trp Phe Ala Asn Ile Val Val  
 130 135 140

Arg Glu Phe Tyr Asp Pro Ser Val Pro Val Ser Gln Lys Tyr Glu Leu  
 145 150 155 160

Gly Ala Ala Leu Tyr Ile Gly Trp Ala Ala Thr Ala Leu Leu Met Val

```
<210> 207
<211> 73
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (73)
<223> Xaa equals stop translation
```

```

<400> 207
Met Thr Ser Tyr Ile Leu Ile Ser Phe Val Leu Leu Ile Gly Val Gly
 1             5             10             15

Cys Ile Glu Lys Asp Gln Ser Cys Pro Val Phe Gly Gly Arg Lys Arg
      20             25             30

Leu His Leu Leu Phe Val Gly Gly Gln Leu Arg Gln Val Arg Met Leu
      35             40             45

Arg Gly Glu Leu Ser Cys Ala Cys Tyr Arg Pro His Val Gln Ala Leu
      50             55             60

Gln Leu Gly Gly Cys Thr Cys Phe Xaa
 65             70

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```
<210> 208
<211> 348
<212> PRT
<213> Homo sapiens
```

```

<400> 208
Met Leu Cys Pro Trp Arg Thr Ala Asn Leu Gly Leu Leu Leu Ile Leu
  1             5             10             15
Thr Ile Phe Leu Val Ala Glu Ala Glu Gly Ala Ala Gln Pro Asn Asn
      20             25             30
Ser Leu Met Leu Gln Thr Ser Lys Glu Asn His Ala Leu Ala Ser Ser
      35             40             45
Ser Leu Cys Met Asp Glu Lys Gln Ile Thr Gln Asn Tyr Ser Lys Val
      50             55             60
Leu Ala Glu Val Asn Thr Ser Trp Pro Val Lys Met Ala Thr Asn Ala
  65             70             75             80

```

```
<210> 209
<211> 73
<212> PRT
<213> Homo sapiens
```

<220>

<221> SITE  
 <222> (73)  
 <223> Xaa equals stop translation

<400> 209  
 Met Ala Arg Gly Cys Val Cys Ser Leu Cys Ala Ser Val Cys Ile Phe  
   1                  5                  10                  15  
 Leu Ser Ser Leu Phe Pro Leu Leu Pro Ser Val His Ser Val Asn Ile  
                   20                  25                  30  
 Ile Ser Cys Leu Leu Leu Ser Lys Cys Phe Glu Gly Leu Glu Leu Met  
           35                  40                  45  
 Cys Glu His Leu Tyr Gln Leu Ser Gln Leu His Val Leu His His Ile  
       50                  55                  60  
 Phe Ser Tyr Leu Leu Cys Thr Pro Xaa  
   65                  70

<210> 210  
 <211> 608  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (265)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (597)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 210  
 Met Val Gly Thr Lys Leu Arg Gln Thr Lys Asp Ala Leu Phe Thr Ile  
   1                  5                  10                  15  
 Leu His Asp Leu Arg Pro Gln Asp Arg Phe Ser Ile Ile Gly Phe Ser  
           20                  25                  30  
 Asn Arg Ile Lys Val Trp Lys Asp His Leu Ile Ser Val Thr Pro Asp  
       35                  40                  45  
 Ser Ile Arg Asp Gly Lys Val Tyr Ile His His Met Ser Pro Thr Gly  
       50                  55                  60  
 Gly Thr Asp Ile Asn Gly Val Leu Gln Arg Ala Ile Arg Leu Leu Asn  
   65                  70                  75                  80  
 Lys Tyr Val Ala His Ser Gly Ile Gly Asp Arg Ser Val Ser Leu Ile  
           85                  90                  95  
 Val Phe Leu Thr Asp Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu  
       100                  105                  110  
 Lys Ile Leu Asn Asn Thr Arg Glu Ala Ala Arg Gly Gln Val Cys Ile

115	120	125
Phe Thr Ile Gly Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu Lys		
130	135	140
Leu Ser Leu Glu Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu Glu		
145	150	155 160
Asp Ala Gly Ser Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr Pro		
165	170	175
Leu Leu Ser Asp Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val Val Gln		
180	185	190
Ala Thr Lys Thr Leu Phe Pro Asn Tyr Phe Asn Gly Ser Glu Ile Ile		
195	200	205
Ile Ala Gly Lys Leu Val Asp Arg Lys Leu Asp His Leu His Val Glu		
210	215	220
Val Thr Ala Ser Asn Ser Lys Lys Phe Ile Ile Leu Lys Thr Asp Val		
225	230	235 240
Pro Val Arg Pro Gln Lys Ala Gly Lys Asp Val Thr Gly Ser Pro Arg		
245	250	255
Pro Gly Gly Asp Gly Glu Gly Asp Xaa Asn His Ile Glu Arg Leu Trp		
260	265	270
Ser Tyr Leu Thr Thr Lys Glu Leu Leu Ser Ser Trp Leu Gln Ser Asp		
275	280	285
Asp Glu Pro Glu Lys Glu Arg Leu Arg Gln Arg Ala Gln Ala Leu Ala		
290	295	300
Val Ser Tyr Arg Phe Leu Thr Pro Phe Thr Ser Met Lys Leu Arg Gly		
305	310	315 320
Pro Val Pro Arg Met Asp Gly Leu Glu Glu Ala His Gly Met Ser Ala		
325	330	335
Ala Met Gly Pro Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly Thr		
340	345	350
Gln Pro Gly Pro Leu Leu Lys Lys Pro Tyr Gln Pro Arg Ile Lys Ile		
355	360	365
Ser Lys Thr Ser Val Asp Gly Asp Pro His Phe Val Val Asp Phe Pro		
370	375	380
Leu Ser Arg Leu Thr Val Cys Phe Asn Ile Asp Gly Gln Pro Gly Asp		
385	390	395 400
Ile Leu Arg Leu Val Ser Asp His Arg Asp Ser Gly Val Thr Val Asn		
405	410	415
Gly Glu Leu Ile Gly Ala Pro Ala Pro Pro Asn Gly His Lys Lys Gln		
420	425	430

Arg Thr Tyr Leu Arg Thr Ile Thr Ile Leu Ile Asn Lys Pro Glu Arg  
 435 440 445  
 Ser Tyr Leu Glu Ile Thr Pro Ser Arg Val Ile Leu Asp Gly Gly Asp  
 450 455 460  
 Arg Leu Val Leu Pro Cys Asn Gln Ser Val Val Val Gly Ser Trp Gly  
 465 470 475 480  
 Leu Glu Val Ser Val Ser Ala Asn Ala Asn Val Thr Val Thr Ile Gln  
 485 490 495  
 Gly Ser Ile Ala Phe Val Ile Leu Ile His Leu Tyr Lys Lys Pro Ala  
 500 505 510  
 Pro Phe Gln Arg His His Leu Gly Phe Tyr Ile Ala Asn Ser Glu Gly  
 515 520 525  
 Leu Ser Ser Asn Cys His Gly Leu Leu Gly Gln Phe Leu Asn Gln Asp  
 530 535 540  
 Ala Arg Leu Thr Glu Asp Pro Ala Gly Pro Ser Gln Asn Leu Thr His  
 545 550 555 560  
 Pro Leu Leu Leu Gln Val Gly Glu Gly Pro Glu Ala Val Leu Thr Val  
 565 570 575  
 Lys Gly His Gln Val Pro Val Val Trp Lys Gln Arg Lys Ile Tyr Asn  
 580 585 590  
 Gly Glu Glu Gln Xaa Asp Cys Trp Phe Ala Arg Asn Met Pro Pro Asn  
 595 600 605

<210> 211  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (252)  
 <223> Xaa equals stop translation

<400> 211  
 Met Ala Pro Ala Ser Arg Leu Leu Ala Leu Trp Ala Leu Ala Ala Val  
 1 5 10 15  
 Ala Leu Pro Gly Ser Gly Ala Glu Gly Asp Gly Gly Trp Arg Pro Gly  
 20 25 30  
 Gly Pro Gly Ala Val Ala Glu Glu Glu Arg Cys Thr Val Glu Arg Arg  
 35 40 45  
 Ala Asp Leu Thr Tyr Ala Glu Phe Val Gln Gln Tyr Ala Phe Val Arg  
 50 55 60

Pro Val Ile Leu Gln Gly Leu Thr Asp Asn Ser Arg Phe Arg Ala Leu  
 65 70 75 80  
 Cys Ser Arg Asp Arg Leu Leu Ala Ser Phe Gly Asp Arg Val Val Arg  
 85 90 95  
 Leu Ser Thr Ala Asn Thr Tyr Ser Tyr His Lys Val Asp Leu Pro Phe  
 100 105 110  
 Gln Glu Tyr Val Glu Gln Leu Leu His Pro Gln Asp Pro Thr Ser Leu  
 115 120 125  
 Gly Asn Asp Thr Leu Tyr Phe Phe Gly Asp Asn Asn Phe Thr Glu Trp  
 130 135 140  
 Ala Ser Leu Phe Arg His Tyr Ser Pro Pro Pro Phe Gly Leu Leu Gly  
 145 150 155 160  
 Thr Ala Pro Ala Tyr Ser Phe Gly Ile Ala Gly Ala Gly Ser Gly Val  
 165 170 175  
 Pro Phe His Trp His Gly Pro Gly Tyr Ser Glu Val Ile Tyr Gly Arg  
 180 185 190  
 Lys Arg Trp Phe Leu Tyr Pro Pro Glu Lys Thr Pro Glu Phe His Pro  
 195 200 205  
 Asn Lys Thr Thr Leu Ala Trp Leu Arg Asp Thr Tyr Pro Ala Cys Thr  
 210 215 220  
 Val Cys Thr Ala Leu Glu Cys Thr Ile Arg Ala Gly Glu Val Leu Thr  
 225 230 235 240  
 Ser Arg Pro Leu Val Ala Cys Tyr Ala Gln Pro Xaa  
 245 250

<210> 212  
 <211> 226  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (226)  
 <223> Xaa equals stop translation

<400> 212  
 Met Lys Glu Ile Pro Ala Leu Leu His Leu Pro Val Leu Ile Ile Met  
 1 5 10 15  
 Ala Leu Ala Ile Leu Ser Phe Cys Tyr Gly Ala Gly Lys Ser Val His  
 20 25 30  
 Val Leu Arg His Ile Gly Gly Pro Glu Arg Glu Pro Pro Gln Ala Leu  
 35 40 45  
 Arg Pro Arg Asp Arg Arg Arg Gln Glu Glu Ile Asp Tyr Arg Pro Asp

```
<210> 213
<211> 51
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (51)
<223> Xaa equals stop translation
```

```

<400> 213
Met Met Gly Leu Leu Glu Thr Gly Asn Val Leu Phe Trp Val Trp Val
 1             5             10             15
Val Val Thr Cys Val Tyr Ser Leu Tyr Ala Asn Ser Leu Asn Cys Thr
      20             25             30
Asp Met Asp Cys Ala Pro Phe Tyr Met Cys Val Met Leu Gln Gln Lys
      35             40             45
Cys Gln Xaa
      50

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155

<210> 214  
 <211> 172  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (172)  
 <223> Xaa equals stop translation

<400> 214

Met Trp Leu Trp Ala Val Ser Pro Val Arg Pro Arg Thr Cys Leu Pro  
 1 5 10 15

Pro Cys Pro Arg Leu Trp Leu Trp Ile Ser Met Thr Leu Val Pro Ser  
 20 25 30

Ser Ser Ala Trp Lys Ser His Gly Ala Pro Ser Thr Arg Met Thr Ser  
 35 40 45

Pro Gln Leu Leu Leu Leu Ser Thr Arg Pro Pro Gln Ser Pro Ser Ala  
 50 55 60

Ser Pro Pro Ile Ala Arg Ala His Arg Thr His Pro His Phe Gly Asn  
 65 70 75 80

Arg Leu Ser Ile Thr Cys Cys Asp Gly Arg Arg Ser Trp Arg Met Gly  
 85 90 95

Gln His Gly Pro Cys His Leu Asn Leu Gln Thr Thr His Pro Ala His  
 100 105 110

Ser Ser Gln Ala Leu Pro Ala Thr His Gln Pro Leu Gly Pro Trp Cys  
 115 120 125

Ser Ser Pro Ser Pro Phe Pro Ser Lys Leu Pro Ser Ala Gly Leu Arg  
 130 135 140

Pro Pro Ala Leu Gly Pro Trp Met Arg Arg Gly Pro Trp Pro Gln Ser  
 145 150 155 160

Trp Gln Met Gly Met His Pro Thr Val Gly Leu Xaa  
 165 170

<210> 215  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (48)  
 <223> Xaa equals stop translation

<400> 215

Met Trp Leu Leu Ile Ile Phe Cys Lys Ser Ala Ser Ala Ser Val Leu  
 1 5 10 15

Cys Trp Ile Lys Lys Phe His Pro Val Phe Gln Glu Ser Leu Leu Tyr  
                   20                  25                  30  
 Leu Val Gln Glu Gly Ser Leu Cys Tyr Val Gln Gln Lys Val Pro Xaa  
           35                  40                  45

<210> 216  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 216  
 Met Glu Ala Val Val Phe Val Phe Ser Leu Leu Asp Cys Cys Ala Leu  
   1                  5                  10                  15  
 Ile Phe Leu Ser Val Tyr Phe Ile Ile Thr Leu Ser Asp Leu Glu Cys  
                   20                  25                  30  
 Asp Tyr Ile Asn Ala Arg Ser Cys Cys Ser Lys Leu Asn Lys Trp Val  
           35                  40                  45  
 Ile Pro Glu Leu Ile Gly His Thr Ile Val Thr Val Leu Leu Leu Met  
   50                  55                  60  
 Ser Leu His Trp Phe Ile Phe Leu Leu Asn Leu Pro Val Ala Thr Trp  
   65                  70                  75                  80  
 Asn Ile Tyr Arg Tyr Ile Met Val Pro Ser Gly Asn Met Gly Val Phe  
           85                  90                  95  
 Asp Pro Thr Glu Ile His Asn Arg Gly Gln Leu Lys Ser His Met Lys  
          100                 105                 110  
 Glu Ala Met Ile Lys Leu Gly Phe His Leu Leu Cys Phe Phe Met Tyr  
          115                 120                 125  
 Leu Tyr Ser Met Ile Leu Ala Leu Ile Asn Asp  
   130                 135

<210> 217  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (41)  
 <223> Xaa equals stop translation

<400> 217  
 Met Ser Gly Ser Ser Leu Pro Ser Ala Leu Ala Leu Ser Leu Leu Leu  
   1                  5                  10                  15

Val Ser Gly Ser Leu Leu Pro Gly Pro Gly Ala Ala Gln Asn Val Arg  
20 25 30

Val Gln Ser Gly Gln Asp Gln Lys Xaa  
35 40

<210> 218  
<211> 52  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (52)  
<223> Xaa equals stop translation

<400> 218  
Met Pro Ser His Ile Arg Ala His Leu Phe Leu Leu Leu Phe Phe Leu  
1 5 10 15

Phe Ile Tyr Gln Gly Ile Ser Ser Ile Ser Gln Ala Ser Gly Leu Thr  
20 25 30

Leu Lys Thr Gln Asn Glu Lys Asp Ile Gln Val Ser Ile Leu Lys Glu  
35 40 45

Phe Val Val Xaa  
50

<210> 219  
<211> 49  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (49)  
<223> Xaa equals stop translation

<400> 219  
Met Cys Ile Tyr Gln Ser Glu Gln Met Leu Ala Leu Leu Leu Val Leu  
1 5 10 15

Val Phe Cys Ile Ser Leu Leu Val Leu Val Cys Trp Gly Ser His Asn  
20 25 30

Lys Val Pro Gln Lys Phe Ile Phe Ser Gln Phe Trp Gly Leu Glu Asp  
35 40 45

Xaa

<210> 220  
<211> 42  
<212> PRT  
<213> Homo sapiens

<220>  
 <221> SITE  
 <222> (42)  
 <223> Xaa equals stop translation

<400> 220  
 Met Ala Val Pro Leu Phe Leu Tyr Ile Phe Thr Leu Leu Pro Leu Leu  
     1                    5                    10                    15  
 Pro Phe Leu Leu Ser Leu Cys Phe Ser Pro Leu Thr Val Lys Arg Ser  
                     20                    25                    30  
 Ser Ser Ser Glu Ser Lys Ser Ser Leu Xaa  
           35                    40

<210> 221  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (41)  
 <223> Xaa equals stop translation

<400> 221  
 Met Gly Met Leu Leu Ala Phe Trp Leu Pro Gly Ala Ser Trp Gln Glu  
     1                    5                    10                    15  
 Ala Gly Pro Arg Ala Ser Thr Gln Arg Met Arg Thr Gln Thr Gln Met  
                     20                    25                    30  
 Ser Thr Arg Lys Pro Lys Pro Ala Xaa  
           35                    40

<210> 222  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (43)  
 <223> Xaa equals stop translation

<400> 222  
 Met Glu Pro Ala Met Val Leu Lys Phe Leu Ser Ser Leu Pro Glu Asn  
     1                    5                    10                    15  
 Leu Phe Leu Pro Ser Leu Leu Phe Phe Ala Trp Leu Cys Trp Asn Met  
                     20                    25                    30  
 Val Cys Gly Ser Pro Val Ser Cys Pro Tyr Xaa  
           35                    40

<210> 223  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (204)  
 <223> Xaa equals stop translation

<400> 223  
 Met Gln Leu Gly Ser Val Leu Leu Thr Arg Cys Pro Phe Trp Gly Cys  
     1                    5                    10                    15  
 Phe Ser Gln Leu Met Leu Tyr Ala Glu Arg Ala Glu Ala Arg Arg Lys  
                     20                    25                    30  
 Pro Asp Ile Pro Val Pro Tyr Leu Tyr Phe Asp Met Gly Ala Ala Val  
             35                    40                    45  
 Leu Cys Ala Ser Phe Met Ser Phe Gly Val Lys Arg Arg Trp Phe Ala  
     50                    55                    60  
 Leu Gly Ala Ala Leu Gln Leu Ala Ile Ser Thr Tyr Ala Ala Tyr Ile  
     65                    70                    75                    80  
 Gly Gly Tyr Val His Tyr Gly Asp Trp Leu Lys Val Arg Met Tyr Ser  
                     85                    90                    95  
 Arg Thr Val Ala Ile Ile Gly Gly Phe Leu Val Leu Ala Ser Gly Ala  
             100                    105                    110  
 Gly Glu Leu Tyr Arg Arg Lys Pro Arg Ser Arg Ser Leu Gln Ser Thr  
             115                    120                    125  
 Gly Gln Val Phe Leu Gly Ile Tyr Leu Ile Cys Val Ala Tyr Ser Leu  
     130                    135                    140  
 Gln His Ser Lys Glu Asp Arg Leu Ala Tyr Leu Asn His Leu Pro Gly  
     145                    150                    155                    160  
 Gly Glu Leu Met Ile Gln Leu Phe Phe Val Leu Tyr Gly Ile Leu Ala  
             165                    170                    175  
 Pro Gly Leu Ser Val Arg Leu Leu Arg Asp Pro Arg Cys Pro Asp Pro  
             180                    185                    190  
 Gly Cys Thr Ala Ala Pro Cys His Ala Ala His Xaa  
     195                    200

<210> 224  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (43)

<223> Xaa equals stop translation

<400> 224

Met Arg Val Arg Ile Gly Leu Thr Leu Leu Leu Cys Ala Val Leu Leu  
1 5 10 15  
Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln Asp Glu Ser  
20 25 30  
Leu Gly Phe Gln Asp Tyr Phe Asp Ile Arg Xaa  
35 40

<210> 225

<211> 156

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (156)

<223> Xaa equals stop translation

<400> 225

Met Ala Arg Gly Ser Leu Arg Arg Leu Leu Arg Leu Leu Val Leu Gly  
1 5 10 15  
Leu Trp Leu Ala Leu Leu Arg Ser Val Ala Gly Glu Gln Ala Pro Gly  
20 25 30  
Thr Ala Pro Cys Ser Arg Gly Ser Ser Trp Ser Ala Asp Leu Asp Lys  
35 40 45  
Cys Met Asp Cys Ser Thr Ser Cys Pro Leu Pro Ala Ala Leu Ala His  
50 55 60  
Pro Trp Gly Arg Ser Glu Pro Asp Leu Arg Ala Gly Ala Ala Phe Trp  
65 70 75 80  
Leu Phe Gly Leu Glu Thr Met Pro Gln Glu Arg Glu Val His His Pro  
85 90 95  
His Arg Gly Asp Arg Arg Arg Gly Leu Pro Ser Cys Gly Ala Asp Pro  
100 105 110  
Val Thr Met Cys Pro Leu Pro Ala Gly Ala Arg Pro Leu Ile Ile His  
115 120 125  
Ser Ser Ile Leu Glu Pro Val Ser Ala Ser Gln Thr Arg Arg Glu Pro  
130 135 140  
Ser Ser Ser Asn His Lys Gly Gly Gly Gly Arg Xaa  
145 150 155

<210> 226

<211> 74

<212> PRT

<213> Homo sapiens

<220>  
 <221> SITE  
 <222> (38)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (48)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (54)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (55)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (68)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (74)  
 <223> Xaa equals stop translation

<400> 226  
 Met Phe Tyr Lys Leu Thr Leu Ile Leu Cys Glu Leu Ser Val Ala Gly  
     1                    5                    10                    15  
 Val Thr Gln Ala Ala Ser Gln Arg Pro Leu Gln Arg Leu Pro Arg His  
             20                    25                    30  
 Ile Cys Ser Gln Arg Xaa Pro Pro Gly Arg Cys Leu Leu Lys Ala Xaa  
             35                    40                    45  
 Leu Gln Thr Thr Trp Xaa Xaa Pro Asp Lys Pro Ile Pro Arg Leu Ser  
     50                    55                    60  
 Pro Pro Leu Xaa Ser Asp Pro Lys Arg Xaa  
     65                    70

<210> 227  
 <211> 167  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (167)  
 <223> Xaa equals stop translation

<400> 227

Met Gly Ser Arg Phe Leu Leu Val Leu Leu Ser Gly Leu Thr Val Leu  
 1 5 10 15  
 Leu Ala Leu Pro Gly Ser Glu Ala Lys Asn Ser Gly Ala Ser Cys Pro  
 20 25 30  
 Pro Cys Pro Lys Tyr Ala Ser Cys His Asn Ser Thr His Cys Thr Cys  
 35 40 45  
 Glu Asp Gly Phe Arg Ala Arg Ser Gly Arg Thr Tyr Phe His Asp Ser  
 50 55 60  
 Ser Glu Lys Cys Glu Asp Ile Asn Glu Cys Glu Thr Gly Leu Ala Lys  
 65 70 75 80  
 Cys Lys Tyr Lys Ala Tyr Cys Arg Asn Lys Val Gly Gly Tyr Ile Cys  
 85 90 95  
 Ser Cys Leu Val Lys Tyr Thr Leu Phe Asn Phe Leu Ala Gly Ile Ile  
 100 105 110  
 Asp Tyr Asp His Pro Asp Cys Tyr Glu Asn Asn Ser Gln Gly Thr Thr  
 115 120 125  
 Gln Ser Asn Val Asp Ile Trp Val Ser Gly Val Lys Pro Gly Phe Gly  
 130 135 140  
 Lys Gln Leu Val Arg Ile Thr Met Pro Phe Ser Tyr Pro Asn Ile Asn  
 145 150 155 160  
 Met Ser Ser Cys Asp Phe Xaa  
 165

<210> 228  
 <211> 71  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (71)  
 <223> Xaa equals stop translation

<400> 228  
 Met Lys Pro Lys His Leu Glu Trp Cys Leu Ala His Ser Trp Cys Val  
 1 5 10 15  
 Ile Trp Leu Ser Phe Val Ser Pro Pro Thr Ser His Leu Glu Cys Asp  
 20 25 30  
 Gly Phe Pro Gly Ser Leu Leu Pro Pro Cys Glu Glu Gly Arg Cys Phe  
 35 40 45  
 Pro Phe Thr Phe His His His Asp Cys His Gly Cys Ser Pro Leu Gln  
 50 55 60  
 Ser Ser Pro Gly Gln His Xaa  
 65 70

<210> 229  
 <211> 273  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (273)  
 <223> Xaa equals stop translation

<400> 229

Met Cys Cys Trp Pro Leu Leu Leu Leu Trp Gly Leu Leu Pro Gly Thr  
 1 5 10 15

Ala Ala Gly Gly Ser Gly Arg Thr Tyr Pro His Arg Thr Leu Leu Asp  
 20 25 30

Ser Glu Gly Lys Tyr Trp Leu Gly Trp Ser Gln Arg Gly Ser Gln Ile  
 35 40 45

Ala Phe Arg Leu Gln Val Arg Thr Ala Gly Tyr Val Gly Phe Gly Phe  
 50 55 60

Ser Pro Thr Gly Ala Met Ala Ser Ala Asp Ile Val Val Gly Gly Val  
 65 70 75 80

Ala His Gly Arg Pro Tyr Leu Gln Asp Tyr Phe Thr Asn Ala Asn Arg  
 85 90 95

Glu Leu Lys Lys Asp Ala Gln Gln Asp Tyr His Leu Glu Tyr Ala Met  
 100 105 110

Glu Asn Ser Thr His Thr Ile Ile Glu Phe Thr Arg Glu Leu His Thr  
 115 120 125

Cys Asp Ile Asn Asp Lys Ser Ile Thr Asp Ser Thr Val Arg Val Ile  
 130 135 140

Trp Ala Tyr His His Glu Asp Ala Gly Glu Ala Gly Pro Lys Tyr His  
 145 150 155 160

Asp Ser Asn Arg Gly Thr Lys Ser Leu Arg Leu Leu Asn Pro Glu Lys  
 165 170 175

Thr Ser Val Leu Ser Thr Ala Leu Pro Tyr Phe Asp Leu Val Asn Gln  
 180 185 190

Asp Val Pro Ile Pro Asn Lys Asp Thr Thr Tyr Trp Cys Gln Met Phe  
 195 200 205

Lys Ile Pro Val Phe Gln Glu Lys His His Val Ile Lys Val Glu Pro  
 210 215 220

Val Ile Gln Arg Gly His Glu Ser Leu Val His His Ile Leu Leu Tyr  
 225 230 235 240

Gln Cys Ser Asn Asn Phe Asn Asp Ser Val Pro Gly Ile Arg Ala Arg

245

250

255

Ile Ala Ile Thr Pro Thr Cys Pro Met His Ser Ser Pro Val Lys Leu  
 260 265 270

Xaa

&lt;210&gt; 230

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (82)

&lt;223&gt; Xaa equals stop translation

&lt;400&gt; 230

Met Arg Pro Gly Thr Ala Leu Gln Ala Val Leu Leu Ala Val Leu Leu  
 1 5 10 15

Val Gly Leu Arg Ala Ala Thr Gly Arg Leu Leu Ser Gly Gln Pro Val  
 20 25 30

Cys Arg Gly Gly Thr Gln Arg Pro Cys Tyr Lys Val Ile Tyr Phe His  
 35 40 45

Asp Thr Ser Arg Arg Leu Asn Phe Glu Glu Ala Lys Glu Ala Cys Arg  
 50 55 60

Arg Gly Trp Arg Pro Ala Ser Gln His Arg Val Leu Lys Met Asn Arg  
 65 70 75 80

Asn Xaa

&lt;210&gt; 231

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 231

Met Ser Pro Leu Ser Ala Ala Arg Ala Ala Leu Arg Val Tyr Ala Val  
 1 5 10 15

Gly Ala Ala Val Ile Leu Ala Gln Leu Arg Arg Cys Arg Gly Gly  
 20 25 30

Phe Leu Glu Pro Val Xaa Pro Pro Arg Pro Asp Arg Val Ala Ile Val  
 35 40 45

165

Thr Gly Gly Thr Asp Gly Ile Gly Tyr Ser Thr Ala Asn Ile Trp Arg  
 50 55 60

Asp Leu Ala Cys Met Leu Ser  
 65 70

&lt;210&gt; 232

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 232

His Glu Arg Ala Xaa Gly Pro Ser Arg Gly His Gly Glu Leu Leu Ser  
 1 5 10 15

Cys Val Leu Gly Pro Arg Leu Tyr Lys Ile Tyr Arg Glu Arg Asp Ser  
 20 25 30

Glu Arg Ala Pro Ala Ser Val Pro Glu Thr Pro Thr Ala Val Thr Ala  
 35 40 45

Pro His Ser Ser Ser Trp Asp Thr Tyr Tyr Gln Pro Arg Ala Leu Glu  
 50 55 60

Lys His Ala Asp Ser Ile Leu Ala Leu Ala Ser Val Phe Trp Ser Ile  
 65 70 75 80

Ser Tyr Tyr Ser Ser Pro Phe Ala Phe Phe Tyr Leu Tyr Arg Lys Gly  
 85 90 95

Tyr Leu Ser Leu Ser Lys Val Val Pro Phe Ser His Tyr Ala Gly Thr  
 100 105 110

Leu Leu Leu Leu Leu Ala Gly Val Ala Cys Ser Glu Ala Leu Ala Ala  
 115 120 125

Gly Pro Thr Pro Ser Thr Gly Ser Ser Ser Pro Ser Trp Lys Gln His  
 130 135 140

Ile Gly Thr Ser Leu Gln Lys Thr Arg Gly Ser Leu Pro Thr Thr Thr  
 145 150 155 160

Leu Thr Ser Gly Ala Gly Gln Ser Thr Ser Thr Gly Lys Asn Pro Ala  
 165 170 175

Ala Gly Arg Ser Leu Glu Gly Ala Leu Pro Ala Gly Val Trp Pro Cys  
 180 185 190

Phe Ala Gln Ser Pro Cys Thr Gly Gly Gln Gln Thr Pro Ser Ser Thr  
 195 200 205

Gly Leu Arg Ser Cys Leu Val Arg Ser Pro Ala Thr Trp Trp Arg Thr  
 210 215 220

Pro  
225

<210> 233  
<211> 314  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (147)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (211)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 233  
Met Leu Pro Ala Arg Leu Pro Phe Arg Leu Leu Ser Leu Phe Leu Arg  
1 5 10 15

Gly Ser Ala Pro Thr Ala Ala Arg His Gly Leu Arg Glu Pro Leu Leu  
20 25 30

Glu Arg Arg Cys Ala Ala Ala Ser Ser Phe Gln His Ser Ser Ser Leu  
35 40 45

Gly Arg Glu Leu Pro Tyr Asp Pro Val Asp Thr Glu Gly Phe Gly Glu  
50 55 60

Gly Gly Asp Met Gln Glu Arg Phe Leu Phe Pro Glu Tyr Ile Leu Asp  
65 70 75 80

Pro Glu Pro Gln Pro Thr Arg Glu Lys Gln Leu Gln Glu Leu Gln Gln  
85 90 95

Gln Gln Glu Glu Glu Glu Arg Gln Arg Gln Gln Arg Arg Glu Glu Arg  
100 105 110

Arg Gln Gln Asn Leu Arg Ala Arg Ser Arg Glu His Pro Val Val Gly  
115 120 125

His Pro Asp Pro Ala Leu Pro Pro Ser Gly Val Asn Cys Ser Gly Cys  
130 135 140

Gly Ala Xaa Leu His Cys Gln Asp Ala Gly Val Pro Gly Tyr Leu Pro  
145 150 155 160

Arg Glu Lys Phe Leu Arg Thr Ala Glu Ala Asp Gly Gly Leu Ala Arg  
165 170 175

Thr Val Cys Gln Arg Cys Trp Leu Leu Ser His His Arg Arg Ala Leu  
180 185 190

Arg Leu Gln Val Ser Arg Glu Gln Tyr Leu Glu Leu Val Ser Ala Ala  
195 200 205

Leu Arg Xaa Pro Gly Pro Ser Leu Val Leu Tyr Met Val Asp Leu Leu  
 210 215 220

Asp Leu Pro Asp Ala Leu Leu Pro Asp Leu Pro Ala Leu Val Gly Pro  
 225 230 235 240

Lys Gln Leu Ile Val Leu Gly Asn Lys Val Asp Leu Leu Pro Gln Asp  
 245 250 255

Ala Pro Gly Tyr Arg Gln Arg Leu Arg Glu Arg Leu Trp Glu Asp Cys  
 260 265 270

Ala Arg Ala Gly Leu Leu Leu Ala Pro Gly Thr Lys Gly His Ser Ala  
 275 280 285

Pro Ser Arg Thr Ser His Arg Thr Gly Arg Ile Arg Ile Arg Arg Thr  
 290 295 300

Gly Pro Ala Gln Trp Ser Gly Thr Cys Gly  
 305 310

<210> 234

<211> 93

<212> PRT

<213> Homo sapiens

<400> 234

Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu Arg Gly Leu  
 1 5 10 15

Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser Ala Ser Glu  
 20 25 30

Ile Pro Lys Gly Lys Gln Lys Ala His Ser Gly Arg Gly Arg Trp Trp  
 35 40 45

Thr Cys Ile Met Glu Cys Ala Tyr Lys Gly Gln Gln Glu Cys Leu Val  
 50 55 60

Glu Thr Gly Ala Leu Gly Pro Met Ala Phe Arg Val His Leu Gly Ser  
 65 70 75 80

Gln Val Gly Met Asp Ser Lys Glu Lys Arg Gly Asn Val  
 85 90

<210> 235

<211> 73

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (73)

<223> Xaa equals stop translation

<400> 235

Met Gly Ser Ala Ala Leu Glu Ile Leu Gly Leu Val Leu Cys Leu Val  
 1 5 10 15  
 Gly Trp Gly Gly Leu Ile Leu Ala Cys Gly Leu Pro Met Trp Gln Val  
 20 25 30  
 Thr Ala Phe Leu Asp His Asn Ile Val Thr Ala Gln Thr Thr Trp Lys  
 35 40 45  
 Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr Gly Thr Cys Ser Ala  
 50 55 60  
 Lys Cys Thr Thr Arg Cys Trp Leu Xaa  
 65 70

<210> 236  
 <211> 349  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (283)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (293)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (325)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (326)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (349)  
 <223> Xaa equals stop translation

<400> 236  
 Met Leu Cys Pro Trp Arg Thr Ala Asn Leu Gly Leu Leu Ile Leu  
 1 5 10 15  
 Thr Ile Phe Leu Val Ala Glu Ala Glu Gly Ala Ala Gln Pro Asn Asn  
 20 25 30  
 Ser Leu Met Leu Gln Thr Ser Lys Glu Asn His Ala Leu Ala Ser Ser  
 35 40 45  
 Ser Leu Cys Met Asp Glu Lys Gln Ile Thr Gln Asn Tyr Ser Lys Val  
 50 55 60

169

Leu Ala Glu Val Asn Thr Ser Trp Pro Val Lys Met Ala Thr Asn Ala  
 65 70 75 80  
 Val Leu Cys Cys Pro Pro Ile Ala Leu Arg Asn Leu Ile Ile Ile Thr  
 85 90 95  
 Trp Glu Ile Ile Leu Arg Gly Gln Pro Ser Cys Thr Lys Ala Tyr Lys  
 100 105 110  
 Lys Glu Thr Asn Glu Thr Lys Glu Thr Asn Cys Thr Asp Glu Arg Ile  
 115 120 125  
 Thr Trp Val Ser Arg Pro Asp Gln Asn Ser Asp Leu Gln Ile Arg Thr  
 130 135 140  
 Val Ala Ile Thr His Asp Gly Tyr Tyr Arg Cys Ile Met Val Thr Pro  
 145 150 155 160  
 Asp Gly Asn Phe His Arg Gly Tyr His Leu Gln Val Leu Val Thr Pro  
 165 170 175  
 Glu Val Thr Leu Phe Gln Asn Arg Asn Arg Thr Ala Val Cys Lys Ala  
 180 185 190  
 Val Ala Gly Lys Pro Ala Ala His Ile Ser Trp Ile Pro Glu Gly Asp  
 195 200 205  
 Cys Ala Thr Lys Gln Glu Tyr Trp Ser Asn Gly Thr Val Thr Val Lys  
 210 215 220  
 Ser Thr Cys His Trp Glu Val His Asn Val Ser Thr Val Asn Cys His  
 225 230 235 240  
 Val Ser His Leu Thr Gly Asn Lys Ser Leu Tyr Ile Glu Leu Leu Pro  
 245 250 255  
 Val Pro Gly Ala Lys Lys Ser Ser Lys Leu Tyr Ile Pro Tyr Ile Ile  
 260 265 270  
 Leu Thr Ile Ile Ile Leu Thr Ile Val Gly Xaa Ile Trp Leu Leu Lys  
 275 280 285  
 Val Asn Gly Cys Xaa Lys Tyr Lys Leu Asn Lys Pro Glu Ser Thr Pro  
 290 295 300  
 Val Val Glu Glu Asp Glu Met Gln Pro Tyr Ala Phe Tyr Thr Glu Lys  
 305 310 315 320  
 Asn Asn Pro Leu Xaa Xaa Thr Thr Asn Lys Val Lys Ala Ser Glu Ala  
 325 330 335  
 Leu Gln Ser Glu Val Asp Thr Asp Leu His Thr Leu Xaa  
 340 345

&lt;210&gt; 237

&lt;211&gt; 17

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 237

Leu Ala Leu Tyr Ser Ala Leu Phe Ser Tyr Ser Gly Trp Asp Thr Leu  
1 5 10 15

Asn

&lt;210&gt; 238

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 238

Val Thr Glu Glu Ile Lys Asn Pro Glu Arg Asn Leu Pro Leu  
1 5 10

&lt;210&gt; 239

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 239

Ile Gly Ile Ser Met Pro Ile Val Thr  
1 5

&lt;210&gt; 240

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 240

Ile Tyr Ile Leu Thr Asn Val Ala Tyr Tyr Thr Val Leu  
1 5 10

&lt;210&gt; 241

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 241

Ser Asp Ala Val Ala Val Thr Phe Ala Asp Gln  
1 5 10

&lt;210&gt; 242

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 242

Val Ala Leu Ser Cys Phe Gly Gly Leu Asn Ala Ser Ile  
1 5 10

<210> 243  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 243  
Ser Arg Leu Phe Phe Val Gly Ser Arg Glu Gly His Leu Pro Asp  
1 5 10 15

<210> 244  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 244  
Ser Phe Ser Tyr Trp Phe Phe Val Gly Leu Ser  
1 5 10

<210> 245  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 245  
Val Gly Gln Leu Tyr Leu Arg Trp Lys Glu Pro  
1 5 10

<210> 246  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 246  
Arg Pro Arg Pro Leu Lys Leu Ser Val Phe Phe Pro Ile Val Phe Cys  
1 5 10 15

<210> 247  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 247  
Asp Thr Ile Asn Ser Leu Ile Gly Ile  
1 5

<210> 248  
<211> 44  
<212> PRT  
<213> Homo sapiens

<400> 248

172

Ala Thr Ala Leu Pro Pro Lys Ile Val Gly Ser Ala Thr Arg Tyr Leu  
 1 5 10 15

Gln Val Leu Cys Met Ser Val Ala Ala Glu Met Asp Leu Glu Asp Gly  
 20 25 30

Gly Glu Met Pro Lys Gln Arg Asp Pro Lys Ser Asn  
 35 40

<210> 249

<211> 352

<212> PRT

<213> Homo sapiens

<400> 249

Leu Leu Ala Ala Ala Cys Ile Cys Leu Leu Thr Phe Ile Asn Cys Ala  
 1 5 10 15

Tyr Val Lys Trp Gly Thr Leu Val Gln Asp Ile Phe Thr Tyr Ala Lys  
 20 25 30

Val Leu Ala Leu Ile Ala Val Ile Val Ala Gly Ile Val Arg Leu Gly  
 35 40 45

Gln Gly Ala Ser Thr His Phe Glu Asn Ser Phe Glu Gly Ser Ser Phe  
 50 55 60

Ala Val Gly Asp Ile Ala Leu Ala Leu Tyr Ser Ala Leu Phe Ser Tyr  
 65 70 75 80

Ser Gly Trp Asp Thr Leu Asn Tyr Val Thr Glu Glu Ile Lys Asn Pro  
 85 90 95

Glu Arg Asn Leu Pro Leu Ser Ile Gly Ile Ser Met Pro Ile Val Thr  
 100 105 110

Ile Ile Tyr Ile Leu Thr Asn Val Ala Tyr Tyr Thr Val Leu Asp Met  
 115 120 125

Arg Asp Ile Leu Ala Ser Asp Ala Val Ala Val Thr Phe Ala Asp Gln  
 130 135 140

Ile Phe Gly Ile Phe Asn Trp Ile Ile Pro Leu Ser Val Ala Leu Ser  
 145 150 155 160

Cys Phe Gly Gly Leu Asn Ala Ser Ile Val Ala Ala Ser Arg Leu Phe  
 165 170 175

Phe Val Gly Ser Arg Glu Gly His Leu Pro Asp Ala Ile Cys Met Ile  
 180 185 190

His Val Glu Arg Phe Thr Pro Val Pro Ser Leu Leu Phe Asn Gly Ile  
 195 200 205

Met Ala Leu Ile Tyr Leu Cys Val Glu Asp Ile Phe Gln Leu Ile Asn  
 210 215 220

Tyr Tyr Ser Phe Ser Tyr Trp Phe Phe Val Gly Leu Ser Ile Val Gly

173

225                      230                      235                      240  
 Gln Leu Tyr Leu Arg Trp Lys Glu Pro Asp Arg Pro Arg Pro Leu Lys  
                                  245                      250                      255  
 Leu Ser Val Phe Phe Pro Ile Val Phe Cys Leu Cys Thr Ile Phe Leu  
                                  260                      265                      270  
 Val Ala Val Pro Leu Tyr Ser Asp Thr Ile Asn Ser Leu Ile Gly Ile  
                                  275                      280                      285  
 Ala Ile Ala Leu Ser Gly Leu Pro Phe Tyr Phe Leu Ile Ile Arg Val  
                                  290                      295                      300  
 Pro Glu His Lys Arg Pro Leu Tyr Leu Arg Arg Ile Val Gly Ser Ala  
 305                                   310                      315                      320  
 Thr Arg Tyr Leu Gln Val Leu Cys Met Ser Val Ala Ala Glu Met Asp  
                                  325                      330                      335  
 Leu Glu Asp Gly Gly Glu Met Pro Lys Gln Arg Asp Pro Lys Ser Asn  
                                  340                      345                      350

<210> 250  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 250  
 Ala Ala Arg Gly Ser Gly Val Arg Asp Pro Leu Glu Glu Ala Val Cys  
   1                                   5                                   10                                   15  
 Pro Phe Ser Asp Leu Gln Leu His Ala Gly Arg Thr Thr Ala Leu Phe  
                                  20                                   25                                   30  
 Lys Ala Val Arg Gln Gly His Leu Ser Leu Gln Arg Leu Leu Leu Ser  
                                  35                                   40                                   45  
 Phe Val Cys Leu Cys Pro Ala Pro Arg Gly Gly Ala Tyr Arg Gly Arg  
                                  50                                   55                                   60  
 Gln Ala Ser Leu Ser Cys Gly Gly Leu His Pro Val Arg Ala Ser Arg  
                                  65                                   70                                   75                                   80  
 Leu Leu Cys Leu Pro Lys Gln Ala Trp Ala Met Ala Gly Ala Pro Pro  
                                  85                                   90                                   95  
 Pro Val Ser Leu Pro Pro Cys Ser Leu Ile Ser Asp Cys Cys Ala Ser  
                                  100                                   105                                   110  
 Asn Gln Arg Asp Ser Val Gly  
                                  115

<210> 251

<211> 356  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (37)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (280)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 251  
 Leu Ser Lys Ala Phe Leu Asp Ser Pro Asn Arg Leu Leu Ala Val Glu  
   1                  5                  10                  15  
 Met Asn Thr Asp His Leu Arg Leu Thr Val Pro Asn Gly Ile Gly Ala  
                   20                  25                  30  
 Leu Lys Leu Arg Xaa Met Glu His Tyr Phe Ser Gln Gly Leu Ser Val  
           35                  40                  45  
 Gln Leu Phe Asn Asp Gly Ser Lys Gly Lys Leu Asn His Leu Cys Gly  
   50                  55                  60  
 Ala Asp Phe Val Lys Ser His Gln Lys Pro Pro Gln Gly Met Glu Ile  
   65                  70                  75                  80  
 Lys Ser Asn Glu Arg Cys Cys Ser Phe Asp Gly Asp Ala Asp Arg Ile  
                   85                  90                  95  
 Val Tyr Tyr Tyr His Asp Ala Asp Gly His Phe His Leu Ile Asp Gly  
           100                  105                  110  
 Asp Lys Ile Ala Thr Leu Ile Ser Ser Phe Leu Lys Glu Leu Leu Val  
   115                  120                  125  
 Glu Ile Gly Glu Ser Leu Asn Ile Gly Val Val Gln Thr Ala Tyr Ala  
   130                  135                  140  
 Asn Gly Ser Ser Thr Arg Tyr Leu Glu Glu Val Met Lys Val Pro Val  
 145                  150                  155                  160  
 Tyr Cys Thr Lys Thr Gly Val Lys His Leu His His Lys Ala Gln Glu  
           165                  170                  175  
 Phe Asp Ile Gly Val Tyr Phe Glu Ala Asn Gly His Gly Thr Ala Leu  
           180                  185                  190  
 Phe Ser Thr Ala Val Glu Met Lys Ile Lys Gln Ser Ala Glu Gln Leu  
           195                  200                  205  
 Glu Asp Lys Lys Arg Lys Ala Ala Lys Met Leu Glu Asn Ile Ile Asp  
   210                  215                  220  
 Leu Phe Asn Gln Ala Ala Gly Asp Ala Ile Ser Asp Met Leu Val Ile  
 225                  230                  235                  240

175

Glu Ala Ile Leu Ala Leu Lys Gly Leu Thr Val Gln Gln Trp Asp Ala  
                   245                  250                  255  
 Leu Tyr Thr Asp Leu Pro Asn Arg Gln Leu Lys Val Gln Val Ala Asp  
                   260                  265                  270  
 Arg Arg Val Ile Ser Thr Thr Xaa Ala Glu Arg Gln Ala Val Thr Pro  
                   275                  280                  285  
 Pro Gly Leu Gln Glu Ala Ile Asn Asp Leu Val Lys Lys Tyr Lys Leu  
                   290                  295                  300  
 Ser Arg Ala Phe Val Arg Pro Ser Gly Thr Glu Asp Val Val Arg Val  
 305                  310                  315                  320  
 Tyr Ala Glu Ala Asp Ser Gln Glu Ser Ala Asp His Leu Ala His Glu  
                   325                  330                  335  
 Val Ser Leu Ala Val Phe Gln Leu Ala Gly Gly Ile Gly Glu Arg Pro  
                   340                  345                  350  
 Gln Pro Gly Phe  
                   355

<210> 252  
 <211> 26  
 <212> PRT  
 <213> Homo sapiens

<400> 252  
 Leu Ser Lys Ala Phe Leu Asp Ser Pro Asn Arg Leu Leu Ala Val Glu  
   1                  5                  10                  15

Met Asn Thr Asp His Leu Arg Leu Thr Val  
                   20                  25

<210> 253  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (11)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 253  
 Pro Asn Gly Ile Gly Ala Leu Lys Leu Arg Xaa Met Glu His Tyr Phe  
   1                  5                  10                  15

Ser Gln Gly Leu Ser Val Gln Leu Phe Asn Asp Gly  
                   20                  25

<210> 254  
 <211> 28

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 254

Ser Lys Gly Lys Leu Asn His Leu Cys Gly Ala Asp Phe Val Lys Ser  
1 5 10 15

His Gln Lys Pro Pro Gln Gly Met Glu Ile Lys Ser  
20 25

&lt;210&gt; 255

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 255

Asn Glu Arg Cys Cys Ser Phe Asp Gly Asp Ala Asp Arg Ile Val Tyr  
1 5 10 15

Tyr Tyr His Asp Ala Asp Gly His Phe His Leu Ile  
20 25

&lt;210&gt; 256

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 256

Asp Gly Asp Lys Ile Ala Thr Leu Ile Ser Ser Phe Leu Lys Glu Leu  
1 5 10 15

Leu Val Glu Ile Gly Glu Ser Leu Asn Ile Gly Val  
20 25

&lt;210&gt; 257

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 257

Val Gln Thr Ala Tyr Ala Asn Gly Ser Ser Thr Arg Tyr Leu Glu Glu  
1 5 10 15

Val Met Lys Val Pro Val Tyr Cys Thr Lys Thr Gly  
20 25

&lt;210&gt; 258

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 258

Val Lys His Leu His His Lys Ala Gln Glu Phe Asp Ile Gly Val Tyr  
1 5 10 15

177

Phe Glu Ala Asn Gly His Gly Thr Ala Leu Phe Ser  
20 25

<210> 259  
<211> 28  
<212> PRT  
<213> Homo sapiens

<400> 259  
Thr Ala Val Glu Met Lys Ile Lys Gln Ser Ala Glu Gln Leu Glu Asp  
1 5 10 15

Lys Lys Arg Lys Ala Ala Lys Met Leu Glu Asn Ile  
20 25

<210> 260  
<211> 28  
<212> PRT  
<213> Homo sapiens

<400> 260  
Ile Asp Leu Phe Asn Gln Ala Ala Gly Asp Ala Ile Ser Asp Met Leu  
1 5 10 15

Val Ile Glu Ala Ile Leu Ala Leu Lys Gly Leu Thr  
20 25

<210> 261  
<211> 28  
<212> PRT  
<213> Homo sapiens

<400> 261  
Val Gln Gln Trp Asp Ala Leu Tyr Thr Asp Leu Pro Asn Arg Gln Leu  
1 5 10 15

Lys Val Gln Val Ala Asp Arg Arg Val Ile Ser Thr  
20 25

<210> 262  
<211> 28  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (2)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 262  
Thr Xaa Ala Glu Arg Gln Ala Val Thr Pro Gly Leu Gln Glu Ala  
1 5 10 15

Ile Asn Asp Leu Val Lys Lys Tyr Lys Leu Ser Arg  
20 25

<210> 263  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 263  
 Ala Phe Val Arg Pro Ser Gly Thr Glu Asp Val Val Arg Val Tyr Ala  
     1                    5                    10                    15  
 Glu Ala Asp Ser Gln Glu Ser Ala  
                     20

<210> 264  
 <211> 26  
 <212> PRT  
 <213> Homo sapiens

<400> 264  
 Asp His Leu Ala His Glu Val Ser Leu Ala Val Phe Gln Leu Ala Gly  
     1                    5                    10                    15  
 Gly Ile Gly Glu Arg Pro Gln Pro Gly Phe  
                     20                    25

<210> 265  
 <211> 443  
 <212> PRT  
 <213> Homo sapiens

<400> 265  
 Gly Thr Arg Ala Ala Pro Gly Leu Gly Ala Trp Gly Arg Arg Ser Pro  
     1                    5                    10                    15  
 Pro Ser Phe Ser Pro Pro Arg Pro Arg Arg Pro Gly Val Met Ala Gly  
                     20                    25                    30  
 Leu Asn Cys Gly Val Ser Ile Ala Leu Leu Gly Val Leu Leu Leu Gly  
             35                    40                    45  
 Ala Ala Arg Leu Pro Arg Gly Ala Glu Ala Phe Glu Ile Ala Leu Pro  
     50                    55                    60  
 Arg Glu Ser Asn Ile Thr Val Leu Ile Lys Leu Gly Thr Pro Thr Leu  
     65                    70                    75                    80  
 Leu Ala Lys Pro Cys Tyr Ile Val Ile Ser Lys Arg His Ile Thr Met  
                     85                    90                    95  
 Leu Ser Ile Lys Ser Gly Glu Arg Ile Val Phe Thr Phe Ser Cys Gln  
             100                    105                    110  
 Ser Pro Glu Asn His Phe Val Ile Glu Ile Gln Lys Asn Ile Asp Cys  
     115                    120                    125  
 Met Ser Gly Pro Cys Pro Phe Gly Glu Val Gln Leu Gln Pro Ser Thr

130	135	140
Ser Leu Leu Pro Thr Leu Asn Arg Thr Phe Ile Trp Asp Val Lys Ala		
145	150	155 160
His Lys Ser Ile Gly Leu Glu Leu Gln Phe Ser Ile Pro Arg Leu Arg		
	165	170 175
Gln Ile Gly Pro Gly Glu Ser Cys Pro Asp Gly Val Thr His Ser Ile		
	180	185 190
Ser Gly Arg Ile Asp Ala Thr Val Val Arg Ile Gly Thr Phe Cys Ser		
	195	200 205
Asn Gly Thr Val Ser Arg Ile Lys Met Gln Glu Gly Val Lys Met Ala		
	210	215 220
Leu His Leu Pro Trp Phe His Pro Arg Asn Val Ser Gly Phe Ser Ile		
	225	230 235 240
Ala Asn Arg Ser Ser Ile Lys Arg Leu Cys Ile Ile Glu Ser Val Phe		
	245	250 255
Glu Gly Glu Gly Ser Ala Thr Leu Met Ser Ala Asn Tyr Pro Glu Gly		
	260	265 270
Phe Pro Glu Asp Glu Leu Met Thr Trp Gln Phe Val Val Pro Ala His		
	275	280 285
Leu Arg Ala Ser Val Ser Phe Leu Asn Phe Asn Leu Ser Asn Cys Glu		
	290	295 300
Arg Lys Glu Glu Arg Val Glu Tyr Tyr Ile Pro Gly Ser Thr Thr Asn		
	305	310 315 320
Pro Glu Val Phe Lys Leu Glu Asp Lys Gln Pro Gly Asn Met Ala Gly		
	325	330 335
Asn Phe Asn Leu Ser Leu Gln Gly Cys Asp Gln Asp Ala Gln Ser Pro		
	340	345 350
Gly Ile Leu Arg Leu Gln Phe Gln Val Leu Val Gln His Pro Gln Asn		
	355	360 365
Glu Ser Asn Lys Ile Tyr Val Val Asp Leu Ser Asn Glu Arg Ala Met		
	370	375 380
Ser Leu Thr Ile Glu Pro Arg Pro Val Lys Gln Ser Arg Lys Phe Val		
	385	390 395 400
Pro Gly Cys Phe Val Cys Leu Glu Ser Arg Thr Cys Ser Ser Asn Leu		
	405	410 415
Thr Leu Thr Ser Gly Ser Lys His Lys Ile Ser Phe Leu Cys Asp Asp		
	420	425 430
Leu Thr Arg Leu Trp Met Asn Val Glu Lys Pro		
	435	440

<210> 266  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 266  
 Phe Glu Ile Ala Leu Pro Arg Glu Ser Asn Ile Thr Val Leu Ile Lys  
   1                  5                  10                  15  
 Leu Gly Thr Pro Thr Leu Leu Ala Lys Pro Cys Tyr Ile Val Ile Ser  
                   20                  25                  30  
 Lys Arg His Ile Thr Met Leu Ser Ile Lys Ser Gly Glu Arg Ile Val  
           35                  40                  45  
 Phe Thr Phe Ser Cys Gln Ser Pro Glu Asn His Phe Val Ile Glu Ile  
   50                  55                  60  
 Gln Lys Asn Ile Asp Cys Met Ser Gly Pro Cys Pro Phe Gly Glu Val  
   65                  70                  75                  80  
 Gln Leu Gln Pro Ser Thr Ser Leu Leu Pro Thr Leu Asn Arg Thr Phe  
                   85                  90                  95  
 Ile Trp Asp Val Lys Ala His Lys Ser Ile Gly Leu Glu Leu Gln Phe  
           100                  105                  110  
 Ser Ile Pro Arg Leu Arg Gln Ile Gly Pro Gly Glu Ser Cys Pro Asp  
   115                  120                  125  
 Gly Val Thr His Ser Ile Ser Gly Arg Ile Asp Ala Thr Val Val Arg  
   130                  135                  140  
 Ile Gly Thr Phe Cys Ser Asn Gly Thr Val Ser Arg Ile Lys Met  
   145                  150                  155

<210> 267  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 267  
 Phe Val Arg Asp Pro Phe Val Arg Leu  
   1                  5

<210> 268  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 268  
 Phe Leu Phe Val Arg Asp Pro Phe Val Arg Leu Ile Ser  
   1                  5                  10

<210> 269

<211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 269  
 Phe Leu Phe Val Arg Asp Pro Phe Val Arg Leu Ile Ser Ala Phe  
 1 5 10 15

<210> 270  
 <211> 380  
 <212> PRT  
 <213> Homo sapiens

<400> 270  
 Tyr Leu His Thr Ser Phe Ser Arg Pro His Thr Gly Pro Pro Leu Pro  
 1 5 10 15  
 Thr Pro Gly Pro Asp Arg Asp Arg Glu Leu Thr Ala Asp Ser Asp Val  
 20 25 30  
 Asp Glu Phe Leu Asp Lys Phe Leu Ser Ala Gly Val Lys Gln Ser Asp  
 35 40 45  
 Leu Pro Arg Lys Glu Thr Glu Gln Pro Pro Ala Pro Gly Ser Met Glu  
 50 55 60  
 Glu Asn Val Arg Gly Tyr Asp Trp Ser Pro Arg Asp Ala Arg Arg Ser  
 65 70 75 80  
 Pro Asp Gln Gly Arg Gln Gln Ala Glu Arg Arg Ser Val Leu Arg Gly  
 85 90 95  
 Phe Cys Ala Asn Ser Ser Leu Ala Phe Pro Thr Lys Glu Arg Ala Phe  
 100 105 110  
 Asp Asp Ile Pro Asn Ser Glu Leu Ser His Leu Ile Val Asp Asp Arg  
 115 120 125  
 His Gly Ala Ile Tyr Cys Tyr Val Pro Lys Val Ala Cys Thr Asn Trp  
 130 135 140  
 Lys Arg Val Met Ile Val Leu Ser Gly Ser Leu Leu His Arg Gly Ala  
 145 150 155 160  
 Pro Tyr Arg Asp Pro Leu Arg Ile Pro Arg Glu His Val His Asn Ala  
 165 170 175  
 Ser Ala His Leu Thr Phe Asn Lys Phe Trp Arg Arg Tyr Gly Lys Leu  
 180 185 190  
 Ser Arg His Leu Met Lys Val Lys Leu Lys Lys Tyr Thr Lys Phe Leu  
 195 200 205  
 Phe Val Arg Asp Pro Phe Val Arg Leu Ile Ser Ala Phe Arg Ser Lys  
 210 215 220  
 Phe Glu Leu Glu Asn Glu Glu Phe Tyr Arg Lys Phe Ala Val Pro Met  
 225 230 235 240

Leu Arg Leu Tyr Ala Asn His Thr Ser Leu Pro Ala Ser Ala Arg Glu  
 245 250 255  
 Ala Phe Arg Ala Gly Leu Lys Val Ser Phe Ala Asn Phe Ile Gln Tyr  
 260 265 270  
 Leu Leu Asp Pro His Thr Glu Lys Leu Ala Pro Phe Asn Glu His Trp  
 275 280 285  
 Arg Gln Val Tyr Arg Leu Cys His Pro Cys Gln Ile Asp Tyr Asp Phe  
 290 295 300  
 Val Gly Lys Leu Glu Thr Leu Asp Glu Asp Ala Ala Gln Leu Leu Gln  
 305 310 315 320  
 Leu Leu Gln Val Asp Arg Gln Leu Arg Phe Pro Pro Ser Tyr Arg Asn  
 325 330 335  
 Arg Thr Ala Ser Ser Trp Glu Glu Asp Trp Phe Ala Lys Ile Pro Leu  
 340 345 350  
 Ala Trp Arg Gln Gln Leu Tyr Lys Leu Tyr Glu Ala Asp Phe Val Leu  
 355 360 365  
 Phe Gly Tyr Pro Lys Pro Glu Asn Leu Leu Arg Asp  
 370 375 380

&lt;210&gt; 271

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 271

Lys Leu Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp Pro  
 1 5 10 15  
 Arg Val Arg Ser Lys Ile Gly Ser Arg Arg Trp Met Leu Gln Leu Ile  
 20 25 30  
 Met Gln Leu Gly Ser Val Leu Leu Thr Arg Cys Pro Phe Trp Gly Cys  
 35 40 45  
 Phe Ser Gln Leu Met Leu Tyr Ala Glu Arg Ala Glu Ala Arg Arg Lys  
 50 55 60  
 Pro Asp Ile Pro Val Pro Tyr Leu Tyr Phe Asp Met Gly Ala Ala Val  
 65 70 75 80  
 Leu Cys Ala Ser Phe Met Ser Phe Gly Val Lys Arg Arg Trp Phe Ala  
 85 90 95  
 Leu Gly Ala Ala Leu Gln Leu Ala Ile Ser Thr Tyr Ala Ala Tyr Ile  
 100 105 110  
 Gly Gly Tyr Val His Tyr Gly Asp Trp Leu Lys Val Arg Met Tyr Ser  
 115 120 125

Arg Thr Val Ala Ile Ile Gly Gly Phe Leu Val Leu Ala Ser Gly Ala  
 130 135 140  
 Gly Glu Leu Tyr Arg Arg Lys Pro Arg Ser Arg Ser Leu Gln Ser Thr  
 145 150 155 160  
 Gly Gln Val Phe Leu Gly Ile Tyr Leu Ile Cys Val Ala Tyr Ser Leu  
 165 170 175  
 Gln His Ser Lys Glu Asp Arg Leu Ala Tyr Leu Asn His Leu Pro Gly  
 180 185 190  
 Gly Glu Leu Met Ile Gln Leu Phe Phe Val Leu Tyr Gly Ile Leu Ala  
 195 200 205  
 Leu Ala Phe Leu Ser Gly Tyr Tyr Val Thr Leu Ala Ala Gln Ile Leu  
 210 215 220  
 Ala Val Leu Leu Pro Pro Val Met Leu Leu Ile Asp Gly Asn Val Ala  
 225 230 235 240  
 Tyr Trp His Asn Thr Arg Arg Val Glu Phe Trp Asn Gln Met Lys Leu  
 245 250 255  
 Leu Gly Glu Ser Val Gly Ile Phe Gly Thr Ala Val Ile Leu Ala Thr  
 260 265 270

Asp Gly

<210> 272  
 <211> 203  
 <212> PRT  
 <213> Homo sapiens

<400> 272  
 Met Gln Leu Gly Ser Val Leu Leu Thr Arg Cys Pro Phe Trp Gly Cys  
 1 5 10 15  
 Phe Ser Gln Leu Met Leu Tyr Ala Glu Arg Ala Glu Ala Arg Arg Lys  
 20 25 30  
 Pro Asp Ile Pro Val Pro Tyr Leu Tyr Phe Asp Met Gly Ala Ala Val  
 35 40 45  
 Leu Cys Ala Ser Phe Met Ser Phe Gly Val Lys Arg Arg Trp Phe Ala  
 50 55 60  
 Leu Gly Ala Ala Leu Gln Leu Ala Ile Ser Thr Tyr Ala Ala Tyr Ile  
 65 70 75 80  
 Gly Gly Tyr Val His Tyr Gly Asp Trp Leu Lys Val Arg Met Tyr Ser  
 85 90 95  
 Arg Thr Val Ala Ile Ile Gly Gly Phe Leu Val Leu Ala Ser Gly Ala  
 100 105 110  
 Gly Glu Leu Tyr Arg Arg Lys Pro Arg Ser Arg Ser Leu Gln Ser Thr

115	120	125
Gly Gln Val Phe Leu Gly Ile Tyr Leu Ile Cys Val Ala Tyr Ser Leu		
130	135	140
Gln His Ser Lys Glu Asp Arg Leu Ala Tyr Leu Asn His Leu Pro Gly		
145	150	155
Gly Glu Leu Met Ile Gln Leu Phe Phe Val Leu Tyr Gly Ile Leu Ala		
165	170	175
Pro Gly Leu Ser Val Arg Leu Leu Arg Asp Pro Arg Cys Pro Asp Pro		
180	185	190
Gly Cys Thr Ala Ala Pro Cys His Ala Ala His		
195	200	

<210> 273  
 <211> 407  
 <212> PRT  
 <213> Homo sapiens

<400> 273
Ser Asn Glu Ile Leu Leu Ser Phe Pro Gln Asn Tyr Tyr Ile Gln Trp
1 5 10 15
Leu Asn Gly Ser Leu Ile His Gly Leu Trp Asn Leu Ala Ser Leu Phe
20 25 30
Ser Asn Leu Cys Leu Phe Val Leu Met Pro Phe Ala Phe Phe Phe Leu
35 40 45
Glu Ser Glu Gly Phe Ala Gly Leu Lys Lys Gly Ile Arg Ala Arg Ile
50 55 60
Leu Glu Thr Leu Val Met Leu Leu Leu Leu Ala Leu Leu Ile Leu Gly
65 70 75 80
Ile Val Trp Val Ala Ser Ala Leu Ile Asp Asn Asp Ala Ala Ser Met
85 90 95
Glu Ser Leu Tyr Asp Leu Trp Glu Phe Tyr Leu Pro Tyr Leu Tyr Ser
100 105 110
Cys Ile Ser Leu Met Gly Cys Leu Leu Leu Leu Leu Cys Thr Pro Val
115 120 125
Gly Leu Ser Arg Met Phe Thr Val Met Gly His Leu Leu Val Lys Pro
130 135 140
Thr Ile Leu Glu Asp Leu Asp Glu Gln Ile Tyr Ile Ile Thr Leu Glu
145 150 155 160
Glu Glu Ala Leu Gln Arg Arg Leu Asn Gly Leu Ser Ser Ser Val Glu
165 170 175
Tyr Asn Ile Met Glu Leu Glu Gln Glu Leu Glu Asn Val Lys Thr Leu
180 185 190

Lys Thr Lys Leu Glu Arg Arg Lys Lys Ala Ser Ala Trp Glu Arg Asn  
 195 200 205  
 Leu Val Tyr Pro Ala Val Met Val Leu Leu Leu Ile Glu Thr Ser Ile  
 210 215 220  
 Ser Val Leu Leu Val Ala Cys Asn Ile Leu Cys Leu Leu Val Asp Glu  
 225 230 235 240  
 Thr Ala Met Pro Lys Gly Thr Arg Gly Pro Gly Ile Gly Asn Ala Ser  
 245 250 255  
 Leu Ser Thr Phe Gly Phe Val Gly Ala Ala Leu Glu Ile Ile Leu Ile  
 260 265 270  
 Phe Tyr Leu Met Val Ser Ser Val Val Gly Phe Tyr Ser Leu Arg Phe  
 275 280 285  
 Phe Gly Asn Phe Thr Pro Lys Lys Asp Asp Thr Thr Met Thr Lys Ile  
 290 295 300  
 Ile Gly Asn Cys Val Ser Ile Leu Val Leu Ser Ser Ala Leu Pro Val  
 305 310 315 320  
 Met Ser Arg Thr Leu Gly Ile Thr Arg Phe Asp Leu Leu Gly Asp Phe  
 325 330 335  
 Gly Arg Phe Asn Trp Leu Gly Asn Phe Tyr Ile Val Leu Ser Tyr Asn  
 340 345 350  
 Leu Leu Phe Ala Ile Val Thr Thr Leu Cys Leu Val Arg Lys Phe Thr  
 355 360 365  
 Ser Ala Val Arg Glu Glu Leu Phe Lys Ala Leu Gly Leu His Lys Leu  
 370 375 380  
 His Leu Pro Asn Thr Ser Arg Asp Ser Glu Thr Ala Lys Pro Ser Val  
 385 390 395 400  
 Asn Gly His Gln Lys Ala Leu  
 405

&lt;210&gt; 274

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 274

Arg Ser Tyr Met Gln Ser Val Trp Thr Glu Glu Ser Gln Cys Thr Leu  
 1 5 10 15  
 Leu Asn Ala Ser Ile Thr Glu Thr Phe Asn Cys Ser Phe Ser Cys Gly  
 20 25 30  
 Pro Asp Cys Trp Lys Leu Ser Gln Tyr Pro Cys Leu Gln Val Tyr Val  
 35 40 45

Asn Leu Thr Ser Ser Gly Glu Lys Leu Leu Leu Tyr His Thr Glu Glu  
 50 55 60  
 Thr Ile Lys Ile Asn Gln Lys Cys Ser Tyr Ile Pro Lys Cys Gly Lys  
 65 70 75 80  
 Asn Phe Glu Glu Ser Met Ser Leu Val Asn Val Val Met Glu Asn Phe  
 85 90 95  
 Arg Lys Tyr Gln His Phe Ser Cys Tyr Ser Asp Pro Glu Gly Asn Gln  
 100 105 110  
 Lys Ser Val Ile Leu Thr Lys Leu Tyr Ser Ser Asn Val Leu Phe His  
 115 120 125  
 Ser Leu Phe Trp Pro Thr Cys Met Met Ala Gly Gly Val Ala Ile Val  
 130 135 140  
 Ala Met Val Lys Leu Thr Gln Tyr Leu Ser Leu Leu Cys Glu Arg Ile  
 145 150 155 160  
 Gln Arg Ile Asn Arg  
 165

<210> 275  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 275  
 Ala Phe Ala His Leu Gln Leu Gly Pro Met Trp Lys Leu Trp Arg Ala  
 1 5 10 15  
 Glu Glu Gly Ala Ala Ala Leu Gly Gly Ala Leu Phe Leu Leu Phe  
 20 25 30  
 Ala Leu Gly Val Arg Gln Leu Leu Lys Gln Arg Arg Pro Met Gly Phe  
 35 40 45  
 Pro Pro Gly Pro Pro Gly Leu Pro Phe Ile Gly Asn Ile Tyr Ser Leu  
 50 55 60  
 Ala Ala Ser Ser Glu Leu Pro His Val Tyr Met Arg Lys Gln Ser Gln  
 65 70 75 80  
 Val Tyr Gly Glu Val Gln Pro Arg Arg Ala Pro Gly Arg Glu Gly Arg  
 85 90 95  
 Gln Ala Gly Pro Gly Trp Pro Gly Pro Ser Trp Leu Asp Leu Trp Pro  
 100 105 110  
 Pro Leu Gly Arg Leu Val Gly Thr Ser Pro Cys Ala Gly Cys Pro Leu  
 115 120 125  
 Arg Asp Thr Arg Phe Pro Gly Leu Glu Gly Arg Ser Pro Arg Arg Arg  
 130 135 140  
 Ala Pro Leu Gln Gly Glu Pro Arg Pro Cys Arg

145

150

155

&lt;210&gt; 276

&lt;211&gt; 42

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 276

Met Arg Val Arg Ile Gly Leu Thr Leu Leu Leu Cys Ala Val Leu Leu  
 1 5 10 15

Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln Asp Glu Ser  
 20 25 30

Leu Gly Phe Gln Asp Tyr Phe Asp Ile Arg  
 35 40

&lt;210&gt; 277

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 277

Met Ala Arg Gly Ser Leu Arg Arg Leu Leu Arg Leu Leu Val Leu Gly  
 1 5 10 15

Leu Trp Leu Ala Leu Leu Arg Ser Val Ala Gly Glu Gln Ala Pro Gly  
 20 25 30

Thr Ala Pro Cys Ser Arg Gly Ser Ser Trp Ser Ala Asp Leu Asp Lys  
 35 40 45

Cys Met Asp Cys Ser Thr Ser Cys Pro Leu Pro Ala Ala Leu Ala His  
 50 55 60

Pro Trp Gly Arg Ser Glu Pro Asp Leu Arg Ala Gly Ala Ala Phe Trp  
 65 70 75 80

Leu Phe Gly Leu Glu Thr Met Pro Gln Glu Arg Glu Val His His Pro  
 85 90 95

His Arg Gly Asp Arg Arg Arg Gly Leu Pro Ser Cys Gly Ala Asp Pro  
 100 105 110

Val Thr Met Cys Pro Leu Pro Ala Gly Ala Arg Pro Leu Ile Ile His  
 115 120 125

Ser Ser Ile Leu Glu Pro Val Ser Ala Ser Gln Thr Arg Arg Glu Pro  
 130 135 140

Ser Ser Ser Asn His Lys Gly Gly Gly Gly Arg  
 145 150 155

&lt;210&gt; 278

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 278

Gly Thr Ser Phe Leu Asp Pro Thr Leu Ser Leu Phe Val Leu Glu Lys  
 1 5 10 15  
 Phe Asn Leu Pro Ala Gly Tyr Val Gly Leu Val Phe Leu Gly Met Ala  
 20 25 30  
 Leu Ser Tyr Ala Ile Ser Ser Pro Leu Phe Gly Leu Leu Ser Asp Lys  
 35 40 45  
 Arg Pro Pro Leu Arg Lys Trp Leu Leu Val Phe Gly Asn Leu Ile Thr  
 50 55 60  
 Ala Gly Cys Tyr Met Leu Leu Gly Pro Val Pro Ile Leu His Ile Lys  
 65 70 75 80  
 Ser Gln Leu Trp Leu Leu Val Leu Ile Leu Val Val Ser Gly Leu Ser  
 85 90 95  
 Ala Gly Met Ser Ile Ile Pro Thr Phe Pro Glu Ile Leu Ser Cys Ala  
 100 105 110  
 His Glu Asn Gly Phe Glu Glu Gly Leu Ser Thr Leu Gly Leu Val Ser  
 115 120 125  
 Gly Leu Phe Ser Ala Met Trp Ser Ile Gly Ala Phe Met Gly Pro Thr  
 130 135 140  
 Leu Gly Gly Phe Leu Tyr Glu Lys Ile Gly Phe Glu Trp Ala Ala Ala  
 145 150 155 160  
 Ile Gln Gly Leu Trp Ala Leu Ile Ser Gly Leu Ala Met Gly Leu Phe  
 165 170 175  
 Tyr Leu Leu Glu Tyr Ser Arg Arg Lys Arg Ser Lys Ser Gln Asn Ile  
 180 185 190  
 Leu Ser Thr Glu Glu Glu Arg Thr Thr Leu Leu Pro Asn Glu Thr  
 195 200 205

&lt;210&gt; 279

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 279

Gly Thr Arg Glu Ala Arg Leu Arg Asp Leu Thr Arg Phe Tyr Asp Lys  
 1 5 10 15  
 Val Leu Ser Leu His Glu Asp Ser Thr Thr Pro Val Ala Asn Pro Leu  
 20 25 30  
 Leu Ala Phe Thr Leu Ile Lys Arg Leu Gln Ser Asp Trp Arg Asn Val  
 35 40 45  
 Val His Ser Leu Glu Ala Ser Glu Asn Ile Arg Ala Leu Lys Asp Gly

50                      55                      60

Tyr Glu Lys Val Glu Gln Asp Leu Pro Ala Phe Glu Asp Leu Glu Gly  
 65                      70                      75                      80

Ala Ala Arg Ala Leu  
                     85

<210> 280  
 <211> 7  
 <212> PRT  
 <213> Homo sapiens

<400> 280  
 Ala Leu Met Arg Leu Gln Asp  
   1                      5

<210> 281  
 <211> 7  
 <212> PRT  
 <213> Homo sapiens

<400> 281  
 Val Glu Ala Gly Gly Ala Thr  
   1                      5

<210> 282  
 <211> 489  
 <212> PRT  
 <213> Homo sapiens

<400> 282  
 Gly Thr Arg Glu Ala Arg Leu Arg Asp Leu Thr Arg Phe Tyr Asp Lys  
   1                      5                      10                      15

Val Leu Ser Leu His Glu Asp Ser Thr Thr Pro Val Ala Asn Pro Leu  
                     20                      25                      30

Leu Ala Phe Thr Leu Ile Lys Arg Leu Gln Ser Asp Trp Arg Asn Val  
                     35                      40                      45

Val His Ser Leu Glu Ala Ser Glu Asn Ile Arg Ala Leu Lys Asp Gly  
                     50                      55                      60

Tyr Glu Lys Val Glu Gln Asp Leu Pro Ala Phe Glu Asp Leu Glu Gly  
   65                      70                      75                      80

Ala Ala Arg Ala Leu Met Arg Leu Gln Asp Val Tyr Met Leu Asn Val  
                     85                      90                      95

Lys Gly Leu Ala Arg Gly Val Phe Gln Arg Val Thr Gly Ser Ala Ile  
                     100                      105                      110

Thr Asp Leu Tyr Ser Pro Lys Arg Leu Phe Ser Leu Thr Gly Asp Asp  
                     115                      120                      125

Cys Phe Gln Val Gly Lys Val Ala Tyr Asp Met Gly Asp Tyr Tyr His  
 130 135 140  
 Ala Ile Pro Trp Leu Glu Ala Val Ser Leu Phe Arg Gly Ser Tyr  
 145 150 155 160  
 Gly Glu Trp Lys Thr Glu Asp Glu Ala Ser Leu Glu Asp Ala Leu Asp  
 165 170 175  
 His Leu Ala Phe Ala Tyr Phe Arg Ala Gly Asn Val Ser Cys Ala Leu  
 180 185 190  
 Ser Leu Ser Arg Glu Phe Leu Leu Tyr Ser Pro Asp Asn Lys Arg Met  
 195 200 205  
 Ala Arg Asn Val Leu Lys Tyr Glu Arg Leu Leu Ala Glu Ser Pro Asn  
 210 215 220  
 His Val Val Ala Glu Ala Val Ile Gln Arg Pro Asn Ile Pro His Leu  
 225 230 235 240  
 Gln Thr Arg Asp Thr Tyr Glu Gly Leu Cys Gln Thr Leu Gly Ser Gln  
 245 250 255  
 Pro Thr Leu Tyr Gln Ile Pro Ser Leu Tyr Cys Ser Tyr Glu Thr Asn  
 260 265 270  
 Ser Asn Ala Tyr Leu Leu Leu Gln Pro Ile Arg Lys Glu Val Ile His  
 275 280 285  
 Leu Glu Pro Tyr Ile Ala Leu Tyr His Asp Phe Val Ser Asp Ser Glu  
 290 295 300  
 Ala Gln Lys Ile Arg Glu Leu Ala Glu Pro Trp Leu Gln Arg Ser Val  
 305 310 315 320  
 Val Ala Ser Gly Glu Lys Gln Leu Gln Val Glu Tyr Arg Ile Ser Lys  
 325 330 335  
 Ser Ala Trp Leu Lys Asp Thr Val Asp Leu Lys Leu Val Thr Leu Asn  
 340 345 350  
 His Arg Ile Ala Ala Leu Thr Gly Leu Asp Val Arg Pro Pro Tyr Ala  
 355 360 365  
 Glu Tyr Leu Gln Val Val Asn Tyr Gly Ile Gly Gly His Tyr Glu Pro  
 370 375 380  
 His Phe Asp His Ala Thr Ser Pro Ser Ser Pro Leu Tyr Arg Met Lys  
 385 390 395 400  
 Ser Gly Asn Arg Val Ala Thr Phe Met Ile Tyr Leu Ser Ser Val Glu  
 405 410 415  
 Ala Gly Gly Ala Thr Ala Phe Ile Tyr Ala Asn Leu Ser Val Pro Val  
 420 425 430  
 Val Arg Asn Ala Ala Leu Phe Trp Trp Asn Leu His Arg Ser Gly Glu  
 435 440 445

Gly Asp Ser Asp Thr Leu His Ala Gly Cys Pro Val Leu Val Gly Asp  
 450 455 460

Lys Trp Val Ala Asn Lys Trp Ile His Glu Tyr Gly Gln Glu Phe Arg  
 465 470 475 480

Arg Pro Cys Ser Ser Ser Pro Glu Asp  
 485

<210> 283

<211> 136

<212> PRT

<213> Homo sapiens

<400> 283

Ile Gln Pro Ser His Ala Ala Leu Leu His Cys Arg Ser Thr Phe Arg  
 1 5 10 15

Lys Thr Glu Cys Leu Asp Pro Trp Trp Val Arg Arg Gln Leu Leu Gly  
 20 25 30

Met Ala Gly Ile Gly Gly Leu Gln Lys Met Lys Ala Pro His Thr Gly  
 35 40 45

Val Leu His Leu Gly Ser Val Trp Val Phe Leu Gly Pro Phe Leu Leu  
 50 55 60

Gly Val Gly Tyr Thr Leu Thr Phe Asn Pro Leu Ser Gly Cys Met Ser  
 65 70 75 80

Thr Val Arg Trp Leu Asn Ser Asn Ile Thr Ala Asn Arg Thr Leu Ser  
 85 90 95

Arg Ser Val Cys His Val Thr Pro Leu His Arg Ser Leu Ser Pro His  
 100 105 110

Asp Gly Glu Tyr Leu Arg Gln Met Leu Leu Asn Ser Ser Ser Arg Ala  
 115 120 125

Gly Glu Ala Gly Ser Trp Gly Tyr  
 130 135

<210> 284

<211> 86

<212> PRT

<213> Homo sapiens

<400> 284

Cys Ser Ser Pro Pro Gly Arg Leu Pro Trp Cys Trp Thr Ala Pro Arg  
 1 5 10 15

Thr Leu Gly Lys His Gly Ser Leu Ile Ser Thr Leu Arg Leu Thr Ala  
 20 25 30

Pro Leu His Leu Ala Trp Lys Met Met Leu Ser Arg Lys Ala Leu Phe  
 35 40 45

Val Leu Leu Asn Thr Pro Val Leu Phe His Ala Leu Glu Gly Arg Leu  
50 55 60

Phe Ser Lys Leu Cys His His His Thr Ile Gln Arg Thr Leu Thr Val  
65 70 75 80

Pro Lys Phe Arg Ser Ser  
85

<210> 285

<211> 75

<212> PRT

<213> Homo sapiens

<400> 285

Arg Ser Pro Thr Ser Arg Val Gln Leu Leu Lys Arg Gln Ser Cys Pro  
1 5 10 15

Cys Gln Arg Asn Asp Leu Asn Glu Glu Pro Gln His Phe Thr His Tyr  
20 25 30

Ala Ile Tyr Asp Phe Ile Val Lys Gly Ser Cys Phe Cys Asn Gly His  
35 40 45

Ala Asp Gln Cys Ile Pro Val His Gly Phe Arg Pro Val Lys Ala Pro  
50 55 60

Gly Thr Phe His Met Val His Gly Lys Cys Met  
65 70 75

<210> 286

<211> 296

<212> PRT

<213> Homo sapiens

<400> 286

His Asn Thr Ala Gly Ser His Cys Gln His Cys Ala Pro Leu Tyr Asn  
1 5 10 15

Asp Arg Pro Trp Glu Ala Ala Asp Gly Lys Thr Gly Ala Pro Asn Glu  
20 25 30

Cys Arg Thr Cys Lys Cys Asn Gly His Ala Asp Thr Cys His Phe Asp  
35 40 45

Val Asn Val Trp Glu Ala Ser Gly Asn Arg Ser Gly Gly Val Cys Asp  
50 55 60

Asp Cys Gln His Asn Thr Glu Gly Gln Tyr Cys Gln Arg Cys Lys Pro  
65 70 75 80

Gly Phe Tyr Arg Asp Leu Arg Arg Pro Phe Ser Ala Pro Asp Ala Cys  
85 90 95

Lys Pro Cys Ser Cys His Pro Val Gly Ser Ala Val Leu Pro Ala Asn  
100 105 110

Ser Val Thr Phe Cys Asp Pro Ser Asn Gly Asp Cys Pro Cys Lys Pro  
 115 120 125  
 Gly Val Ala Gly Arg Arg Cys Asp Arg Cys Met Val Gly Tyr Trp Gly  
 130 135 140  
 Phe Gly Asp Tyr Gly Cys Arg Pro Cys Asp Cys Ala Gly Ser Cys Asp  
 145 150 155 160  
 Pro Ile Thr Gly Asp Cys Ile Ser Ser His Thr Asp Ile Asp Trp Tyr  
 165 170 175  
 His Glu Val Pro Asp Phe Arg Pro Val His Asn Lys Ser Glu Pro Ala  
 180 185 190  
 Trp Glu Trp Glu Asp Ala Gln Gly Phe Ser Ala Leu Leu His Ser Gly  
 195 200 205  
 Lys Cys Glu Cys Lys Glu Gln Thr Leu Gly Asn Ala Lys Ala Phe Cys  
 210 215 220  
 Gly Met Lys Tyr Ser Tyr Val Leu Lys Ile Lys Ile Leu Ser Ala His  
 225 230 235 240  
 Asp Lys Gly Thr His Val Glu Val Asn Val Lys Ile Lys Lys Val Leu  
 245 250 255  
 Lys Ser Thr Lys Leu Lys Ile Phe Arg Gly Lys Ala Asn Ile Ile Ser  
 260 265 270  
 Arg Ile Met Asp Gly Gln Arg Met His Leu Ser Asn Pro Gln Ser Trp  
 275 280 285  
 Phe Gly Ile Pro Cys Ser Arg Thr  
 290 295

<210> 287  
 <211> 37  
 <212> PRT  
 <213> Homo sapiens

<400> 287  
 Cys Asp Asp Cys Gln His Asn Thr Glu Gly Gln Tyr Cys Gln Arg Cys  
 1 5 10 15

Lys Pro Gly Phe Tyr Arg Asp Leu Arg Arg Pro Phe Ser Ala Pro Asp  
 20 25 30

Ala Cys Lys Pro Cys  
 35

<210> 288  
 <211> 36  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 288

Cys Pro Cys Lys Pro Gly Val Ala Gly Arg Arg Cys Asp Arg Cys Met  
 1 5 10 15

Val Gly Tyr Trp Gly Phe Gly Asp Tyr Gly Cys Arg Pro Cys Asp Cys  
 20 25 30

Ala Gly Ser Cys  
 35

&lt;210&gt; 289

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 289

Asn Ile Ser Ser Gln Tyr Cys Ile Leu Lys Ser Leu Glu Met Met Ile  
 1 5 10 15

Ser Gly Leu Lys Leu Leu Val Leu Phe Leu Lys Phe Ala Pro Glu Asn  
 20 25 30

Tyr Cys Leu Ser Thr Glu Thr Leu Gln Met Pro Asn Arg His Leu Arg  
 35 40 45

Leu Ser Lys Ala Thr Cys Tyr Leu Met Lys Cys Leu Leu Pro Ser Tyr  
 50 55 60

Phe Glu  
 65

&lt;210&gt; 290

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 290

Pro Ile Glu Gly Thr Pro Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg  
 1 5 10 15

Pro Thr Arg Pro Gln Arg Met Arg Ser Leu Ile Ser Ser His Pro Cys  
 20 25 30

Gln His Leu Leu Leu Leu Leu Leu Leu Phe Leu Ile Leu Ala Ile  
 35 40 45

Leu Val Asp Val Lys Trp Tyr Leu Val Leu Phe Ile Cys Ile Ser Leu  
 50 55 60

Met Thr Ser Asp Val Glu His Leu Phe Met Cys Leu Leu Ala Ile Arg  
 65 70 75 80

Ile Ser Ser Trp Arg Asn Val Tyr  
 85

&lt;210&gt; 291

<211> 60  
<212> PRT  
<213> Homo sapiens

<400> 291  
Asn Trp Val Pro Thr Cys Leu Cys Pro Ser Ala Pro Cys Ser Phe His  
1 5 10 15  
Leu Leu Ser Arg Phe Lys Cys Leu Phe Ser Pro Gln Arg Leu Thr Asp  
20 25 30  
Ile Phe Arg Arg Tyr Asp Thr Asp Gln Asp Gly Trp Ile Gln Val Ser  
35 40 45  
Tyr Glu Gln Tyr Leu Ser Met Val Phe Ser Ile Val  
50 55 60

<210> 292  
<211> 33  
<212> PRT  
<213> Homo sapiens

<400> 292  
Gln Arg Leu Thr Asp Ile Phe Arg Arg Tyr Asp Thr Asp Gln Asp Gly  
1 5 10 15  
Trp Ile Gln Val Ser Tyr Glu Gln Tyr Leu Ser Met Val Phe Ser Ile  
20 25 30

Val

<210> 293  
<211> 73  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (38)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (48)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (54)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (55)  
<223> Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (68)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 293

Met Phe Tyr Lys Leu Thr Leu Ile Leu Cys Glu Leu Ser Val Ala Gly  
 1 5 10 15

Val Thr Gln Ala Ala Ser Gln Arg Pro Leu Gln Arg Leu Pro Arg His  
 20 25 30

Ile Cys Ser Gln Arg Xaa Pro Pro Gly Arg Cys Leu Leu Lys Ala Xaa  
 35 40 45

Leu Gln Thr Thr Trp Xaa Xaa Pro Asp Lys Pro Ile Pro Arg Leu Ser  
 50 55 60

Pro Pro Leu Xaa Ser Asp Pro Lys Arg  
 65 70

&lt;210&gt; 294

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 294

Thr Ser Ser Pro Val Phe Ser Phe Cys Ser Met Ala Val Arg Glu Pro  
 1 5 10 15

Asp His Leu Gln Arg Val Ser Leu Pro Arg Tyr Asn Val Ser Ala Ser  
 20 25 30

Leu Gln Trp Leu Pro Cys His Arg Ile Val Leu Gln Pro Trp His Met  
 35 40 45

Cys Ala Met Trp Glu Leu Gly Gln Val Leu Phe His Pro Val Ala Pro  
 50 55 60

Arg Glu Gly Ala Ala Pro Ser Pro Val Ser Thr Leu Thr Trp Pro Ser  
 65 70 75 80

Ser Cys Ser His Ser Glu Ser Thr Met Glu Leu Glu Leu Gln Phe  
 85 90 95

&lt;210&gt; 295

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 295

Met Ala Val Arg Glu Pro Asp His Leu Gln Arg Val Ser Leu Pro Arg  
 1 5 10 15

<210> 296  
 <211> 7  
 <212> PRT  
 <213> Homo sapiens

<400> 296  
 Leu Pro Cys His Arg Ile Val  
 1 5

<210> 297  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 297  
 Ser Leu Gln Trp Leu Pro Cys His Arg Ile Val Leu Gln Pro Trp  
 1 5 10 15

<210> 298  
 <211> 454  
 <212> PRT  
 <213> Homo sapiens

<400> 298  
 Cys Phe Lys Arg Lys Pro Lys Arg Glu His Cys Ser Cys Pro Ile Thr  
 1 5 10 15

Tyr Gln Ser Leu Gly Asp Ile Leu Asn Ala Ser Phe Phe Ser Lys Arg  
 20 25 30

Lys Gly Met Gln Glu Val Lys Leu Asn Ser Tyr Val Val Ser Gly Thr  
 35 40 45

Ile Gly Leu Lys Glu Lys Ile Ser Leu Ser Glu Pro Val Phe Leu Thr  
 50 55 60

Phe Arg His Asn Gln Pro Gly Asp Lys Arg Thr Lys His Ile Cys Val  
 65 70 75 80

Tyr Trp Glu Gly Ser Glu Gly Gly Arg Trp Ser Thr Glu Gly Cys Ser  
 85 90 95

His Val His Ser Asn Gly Ser Tyr Thr Lys Cys Lys Cys Phe His Leu  
 100 105 110

Ser Ser Phe Ala Val Leu Val Ala Leu Ala Pro Lys Glu Asp Pro Val  
 115 120 125

Leu Thr Val Ile Thr Gln Val Gly Leu Thr Ile Ser Leu Leu Cys Leu  
 130 135 140

Phe Leu Ala Ile Leu Thr Phe Leu Leu Cys Arg Pro Ile Gln Asn Thr  
 145 150 155 160

Ser Thr Ser Leu His Leu Glu Leu Ser Leu Cys Leu Phe Leu Ala His  
 165 170 175

Leu Leu Phe Leu Thr Gly Ile Asn Arg Thr Glu Pro Glu Val Leu Cys  
 180 185 190  
 Ser Ile Ile Ala Gly Leu Leu His Phe Leu Tyr Leu Ala Cys Phe Thr  
 195 200 205  
 Trp Met Leu Leu Glu Gly Leu His Leu Phe Leu Thr Val Arg Asn Leu  
 210 215 220  
 Lys Val Ala Asn Tyr Thr Ser Thr Gly Arg Phe Lys Lys Arg Phe Met  
 225 230 235 240  
 Tyr Pro Val Gly Tyr Gly Ile Pro Ala Val Ile Ile Ala Val Ser Ala  
 245 250 255  
 Ile Val Gly Pro Gln Asn Tyr Gly Thr Phe Thr His Cys Trp Leu Lys  
 260 265 270  
 Leu Asp Lys Gly Phe Ile Trp Ser Phe Met Gly Pro Val Ala Val Ile  
 275 280 285  
 Ile Leu Ile Asn Leu Val Phe Tyr Phe Gln Val Leu Trp Ile Leu Arg  
 290 295 300  
 Ser Lys Leu Ser Ser Leu Asn Lys Glu Val Ser Thr Ile Gln Asp Thr  
 305 310 315 320  
 Arg Val Met Thr Phe Lys Ala Ile Ser Gln Leu Phe Ile Leu Gly Cys  
 325 330 335  
 Ser Trp Gly Leu Gly Phe Phe Met Val Glu Glu Val Gly Lys Thr Ile  
 340 345 350  
 Gly Ser Ile Ile Ala Tyr Ser Phe Thr Ile Ile Asn Thr Leu Gln Gly  
 355 360 365  
 Val Leu Leu Phe Val Val His Cys Leu Leu Asn Arg Gln Val Arg Met  
 370 375 380  
 Glu Tyr Lys Lys Trp Phe Ser Gly Met Arg Lys Gly Val Glu Thr Glu  
 385 390 395 400  
 Ser Thr Glu Met Ser Arg Ser Thr Thr Gln Thr Lys Thr Glu Glu Val  
 405 410 415  
 Gly Lys Ser Ser Glu Ile Phe His Lys Gly Gly Thr Ala Ser Ser Ser  
 420 425 430  
 Ala Glu Ser Thr Lys Gln Pro Gln Pro Gln Val His Leu Val Ser Ala  
 435 440 445  
 Ala Trp Leu Lys Met Asn  
 450

&lt;210&gt; 299

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 299

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Phe Phe Trp Lys Glu Asn Leu Arg Arg Asn Gly Ser Arg Glu Asp Phe
 1             5             10             15
Ala Arg Arg Ala Thr Gln Leu Ile Gln Ser Val Glu Leu Ser Ile Trp
          20             25             30
Asn Ala Ser Phe Ala Ser Pro Gly Lys Gly Gln Ile Ser Glu Phe Asp
          35             40             45
Ile Val Tyr Glu Thr Lys Arg Cys Asn Glu Thr Arg Glu Asn Ala Phe
          50             55             60
Leu Glu Ala Gly Asn Asn Thr Met Asp Ile Asn Cys Ala Asp Ala Leu
          65             70             75             80
Lys Gly Asn Leu Arg Glu Ser Thr Ala Val Ala Leu Ser Leu Ile Asn
          85             90             95
Leu Leu Gly Ile Phe
          100

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&lt;210&gt; 300

&lt;211&gt; 27

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 300

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Asp Ile Asn Glu Cys Glu Thr Gly Leu Ala Lys Cys Lys Tyr Lys Ala
 1             5             10             15
Tyr Cys Arg Asn Lys Val Gly Gly Tyr Ile Cys
          20             25

```

&lt;210&gt; 301

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 301

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Cys Arg Asn Lys Val Gly Gly Tyr Ile Cys Ser Cys
 1             5             10

```

&lt;210&gt; 302

&lt;211&gt; 331

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 302

```

Ala Leu Cys Pro His Pro His Leu Ile Leu Asn Val Thr Val Ser Pro
 1             5             10             15
Ala Pro Ser Cys Arg His Val Lys Lys Val Val Ala Ser Pro Ser Pro
          20             25             30

```

Ser Thr Thr Met Ile Ala Met Asp Ala Pro His Ser Lys Ala Ala Leu  
 35 40 45  
 Asp Ser Ile Asn Glu Leu Pro Glu Asn Ile Leu Leu Glu Leu Phe Thr  
 50 55 60  
 His Val Pro Ala Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser  
 65 70 75 80  
 Leu Trp Arg Asp Leu Ile Asp Leu Met Thr Leu Trp Lys Arg Lys Cys  
 85 90 95  
 Leu Arg Glu Gly Phe Ile Thr Lys Asp Trp Asp Gln Pro Val Ala Asp  
 100 105 110  
 Trp Lys Ile Phe Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu Arg  
 115 120 125  
 Asn Pro Cys Ala Glu Glu Asp Met Phe Ala Trp Gln Ile Asp Phe Asn  
 130 135 140  
 Gly Gly Asp Arg Trp Lys Val Glu Ser Leu Pro Gly Ala His Gly Thr  
 145 150 155 160  
 Asp Phe Pro Asp Pro Lys Val Lys Lys Tyr Phe Val Thr Ser Tyr Glu  
 165 170 175  
 Met Cys Leu Lys Ser Gln Leu Val Asp Leu Val Ala Glu Gly Tyr Trp  
 180 185 190  
 Glu Glu Leu Leu Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp  
 195 200 205  
 Phe Ala Ala Arg Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln  
 210 215 220  
 Leu Ala Ser Ala Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Pro Pro  
 225 230 235 240  
 Val Thr Ile Gln Gln Trp Asn Asn Ala Thr Trp Thr Glu Val Ser Tyr  
 245 250 255  
 Thr Phe Ser Asp Tyr Pro Arg Gly Val Arg Tyr Ile Leu Phe Gln His  
 260 265 270  
 Gly Gly Arg Asp Thr Gln Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val  
 275 280 285  
 Thr Asn Ser Ser Ile Val Val Ser Pro Lys Met Thr Arg Asn Gln Ala  
 290 295 300  
 Ser Ser Glu Ala Gln Pro Gly Gln Lys His Gly Gln Glu Glu Ala Ala  
 305 310 315 320  
 Gln Ser Pro Tyr Arg Ala Val Val Gln Ile Phe  
 325 330

201

&lt;210&gt; 303

&lt;211&gt; 328

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 303

Arg Gln Arg Ser Trp Asn Pro Gly Thr Asn Cys Tyr His Pro Asn Met  
 1 5 10 15

Pro Asp Ala Phe Leu Thr Cys Glu Thr Val Ile Phe Ala Trp Ala Ile  
 20 25 30

Gly Gly Glu Gly Phe Ser Tyr Pro Pro His Val Gly Leu Ser Leu Gly  
 35 40 45

Thr Pro Leu Asp Pro His Tyr Val Leu Leu Glu Val His Tyr Asp Asn  
 50 55 60

Pro Thr Tyr Glu Glu Gly Leu Ile Asp Asn Ser Gly Leu Arg Leu Phe  
 65 70 75 80

Tyr Thr Met Asp Ile Arg Lys Tyr Asp Ala Gly Val Ile Glu Ala Gly  
 85 90 95

Leu Trp Val Ser Leu Phe His Thr Ile Pro Pro Gly Met Pro Glu Phe  
 100 105 110

Gln Ser Glu Gly His Cys Thr Leu Glu Cys Leu Glu Glu Ala Leu Glu  
 115 120 125

Ala Glu Lys Pro Ser Gly Ile His Val Phe Ala Val Leu Leu His Ala  
 130 135 140

His Leu Ala Gly Arg Gly Ile Arg Leu Arg His Phe Arg Lys Gly Lys  
 145 150 155 160

Glu Met Lys Leu Leu Ala Tyr Asp Asp Asp Phe Asp Phe Asn Phe Gln  
 165 170 175

Glu Phe Gln Tyr Leu Lys Glu Glu Gln Thr Ile Leu Pro Gly Asp Asn  
 180 185 190

Leu Ile Thr Glu Cys Arg Tyr Asn Thr Lys Asp Arg Ala Glu Met Thr  
 195 200 205

Trp Gly Gly Leu Ser Thr Arg Ser Glu Met Cys Leu Ser Tyr Leu Leu  
 210 215 220

Tyr Tyr Pro Arg Ile Asn Leu Thr Arg Cys Ala Ser Ile Pro Asp Ile  
 225 230 235 240

Met Glu Gln Leu Gln Phe Ile Gly Val Lys Glu Ile Tyr Arg Pro Val  
 245 250 255

Thr Thr Trp Pro Phe Ile Ile Lys Ser Pro Lys Gln Tyr Lys Asn Leu  
 260 265 270

Ser Phe Met Asp Ala Met Asn Lys Phe Lys Trp Thr Lys Lys Glu Gly  
 275 280 285

Leu Ser Phe Asn Lys Leu Val Leu Ser Leu Pro Val Asn Val Arg Cys  
 290 295 300

Ser Lys Thr Asp Asn Ala Glu Trp Ser Ile Pro Arg Asn Asp Ser Ile  
 305 310 315 320

Thr Ser Arg Tyr Arg Lys Thr Leu  
 325

<210> 304

<211> 272

<212> PRT

<213> Homo sapiens

<400> 304

Met Cys Cys Trp Pro Leu Leu Leu Leu Trp Gly Leu Leu Pro Gly Thr  
 1 5 10 15

Ala Ala Gly Gly Ser Gly Arg Thr Tyr Pro His Arg Thr Leu Leu Asp  
 20 25 30

Ser Glu Gly Lys Tyr Trp Leu Gly Trp Ser Gln Arg Gly Ser Gln Ile  
 35 40 45

Ala Phe Arg Leu Gln Val Arg Thr Ala Gly Tyr Val Gly Phe Gly Phe  
 50 55 60

Ser Pro Thr Gly Ala Met Ala Ser Ala Asp Ile Val Val Gly Gly Val  
 65 70 75 80

Ala His Gly Arg Pro Tyr Leu Gln Asp Tyr Phe Thr Asn Ala Asn Arg  
 85 90 95

Glu Leu Lys Lys Asp Ala Gln Gln Asp Tyr His Leu Glu Tyr Ala Met  
 100 105 110

Glu Asn Ser Thr His Thr Ile Ile Glu Phe Thr Arg Glu Leu His Thr  
 115 120 125

Cys Asp Ile Asn Asp Lys Ser Ile Thr Asp Ser Thr Val Arg Val Ile  
 130 135 140

Trp Ala Tyr His His Glu Asp Ala Gly Glu Ala Gly Pro Lys Tyr His  
 145 150 155 160

Asp Ser Asn Arg Gly Thr Lys Ser Leu Arg Leu Leu Asn Pro Glu Lys  
 165 170 175

Thr Ser Val Leu Ser Thr Ala Leu Pro Tyr Phe Asp Leu Val Asn Gln  
 180 185 190

Asp Val Pro Ile Pro Asn Lys Asp Thr Thr Tyr Trp Cys Gln Met Phe  
 195 200 205

Lys Ile Pro Val Phe Gln Glu Lys His His Val Ile Lys Val Glu Pro  
 210 215 220

Val Ile Gln Arg Gly His Glu Ser Leu Val His His Ile Leu Leu Tyr  
 225 230 235 240

Gln Cys Ser Asn Asn Phe Asn Asp Ser Val Pro Gly Ile Arg Ala Arg  
 245 250 255

Ile Ala Ile Thr Pro Thr Cys Pro Met His Ser Ser Pro Val Lys Leu  
 260 265 270

<210> 305

<211> 207

<212> PRT

<213> Homo sapiens

<400> 305

Thr Gly Thr Phe Trp Ser Pro Arg Ser Gln Arg Arg Gly Cys Cys Gly  
 1 5 10 15

Arg Arg Ala Pro Arg Pro Glu Ala Met Glu Asn Gly Ala Val Tyr Ser  
 20 25 30

Pro Thr Thr Glu Glu Asp Pro Gly Pro Ala Arg Gly Pro Arg Ser Gly  
 35 40 45

Leu Ala Ala Tyr Phe Phe Met Gly Arg Leu Pro Leu Leu Arg Arg Val  
 50 55 60

Leu Lys Gly Leu Gln Leu Leu Ser Leu Leu Ala Phe Ile Cys Glu  
 65 70 75 80

Glu Val Val Ser Gln Cys Thr Leu Cys Gly Gly Leu Tyr Phe Phe Glu  
 85 90 95

Phe Val Ser Cys Ser Ala Phe Leu Leu Ser Leu Leu Ile Leu Ile Val  
 100 105 110

Tyr Cys Thr Pro Phe Tyr Glu Arg Val Asp Thr Thr Lys Val Lys Ser  
 115 120 125

Ser Asp Phe Tyr Ile Thr Leu Gly Thr Gly Cys Val Phe Leu Leu Ala  
 130 135 140

Ser Ile Ile Phe Val Ser Thr His Asp Arg Thr Ser Ala Glu Ile Ala  
 145 150 155 160

Ala Ile Val Phe Gly Phe Ile Ala Ser Phe Met Phe Leu Leu Asp Phe  
 165 170 175

Ile Thr Met Leu Tyr Glu Lys Arg Gln Glu Ser Gln Leu Arg Lys Pro  
 180 185 190

Glu Asn Thr Thr Arg Ala Glu Ala Leu Thr Glu Pro Leu Asn Ala  
 195 200 205

<210> 306  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 306  
 Ala Ser Ala Pro Arg Val Met Arg Gly His Leu Ala Gly Phe Pro Ala  
 1 5 10 15  
 Leu Ser Gly Leu Ala Ser Val Cys Leu Trp Ala Thr Phe Ser Ala Gln  
 20 25 30  
 Leu Pro Gly Pro Val Ala Ala Thr Ser Trp Thr Pro Ala Pro Leu Gly  
 35 40 45  
 Cys Ser Ala Ala Arg Ser Gly Pro Glu Lys Arg Leu Gly Thr Ala Ala  
 50 55 60  
 Pro Gly Ser Ala Ala Ser Leu Ala Gln Ala Gly Pro Gly Ala Pro Cys  
 65 70 75 80  
 Arg Val Leu Pro Val Asp Pro Ala Pro Ala Ala Leu Asn Val Arg Glu  
 85 90 95  
 Pro Gly Trp Leu Gly Gly Leu Phe Asp Gly Ala Leu Leu Gln Val Leu  
 100 105 110  
 Leu Asn Phe Leu Arg Lys Ser Thr Asp Val Leu Met Asp Thr Arg Glu  
 115 120 125  
 Ala Glu Ser Leu Glu Val Glu  
 130 135

<210> 307  
 <211> 188  
 <212> PRT  
 <213> Homo sapiens

<400> 307  
 Asn Lys Leu His Ser Phe Pro Val Phe Leu Ser Gln Leu Leu Leu Asp  
 1 5 10 15  
 Arg Gln Leu Leu His Ala Pro Gln Thr Leu Pro Thr Pro His Cys Gly  
 20 25 30  
 Gly Ser Ser Arg Pro Gly Pro Ser His Pro Pro Trp Leu Leu Ile Gln  
 35 40 45  
 Leu Pro Cys Val His Val Ala Leu Trp Gln Met Leu Arg Asp Phe Ser  
 50 55 60  
 Asp Ser Arg Ile Thr Pro Ser Thr Leu Thr Thr Gln Pro Ala Ala Gln  
 65 70 75 80  
 Thr Ala Ala Pro Ala Lys Asp Gln Glu Ser Asp Ile Val Gly Gly Glu  
 85 90 95  
 Gly Ile Leu Cys Asp Ile Ala Phe Leu Gln Glu Asp His Pro Leu Gly

100	105	110
Val Gly Gly Ala Ser Ala Pro Ser Ser Arg Arg Glu Leu Ser Arg Arg		
115	120	125
Gly Val His Thr Gln Thr Leu Pro Glu Asp Gly Thr Leu His Gly Thr		
130	135	140
Pro Ser Ser Ser Phe Asp Cys Gly Ile Lys Tyr Ile Ile Ser Trp Pro		
145	150	155
Leu Ala Pro Gly Cys Asp Leu Pro Ser Leu Glu Leu Ser Leu Val Cys		
165	170	175
Lys Gly Val Ser Ser Cys Met Gly Phe Ala Ala Gly		
180	185	

<210> 308  
 <211> 78  
 <212> PRT  
 <213> Homo sapiens

<400> 308  
 Pro Gly Arg Pro Thr Arg Pro Thr Lys Asn Lys Val Cys Val Cys Leu  
 1 5 10 15  
 Gly Met Leu Phe Trp Ala Tyr Pro Ile Cys Val Phe Ile Asp Ser Leu  
 20 25 30  
 Ser Cys Gln Pro Cys Leu Trp Ser Thr Gly Ala Thr Ser His Phe Asn  
 35 40 45  
 Ser Pro Thr Thr Ser Pro Leu Phe Thr Leu Phe Met Pro Cys Ala Leu  
 50 55 60  
 Ala Pro Asn Pro Phe Thr Gln Leu Gly Lys Leu Asp Asp Arg  
 65 70 75

<210> 309  
 <211> 10  
 <212> PRT  
 <213> Homo sapiens

<400> 309  
 Pro Val Asp Leu Thr Lys Thr Arg Leu Gln  
 1 5 10

<210> 310  
 <211> 10  
 <212> PRT  
 <213> Homo sapiens

<400> 310  
 Pro Thr Asp Val Leu Lys Ile Arg Met Gln  
 1 5 10

<210> 311  
 <211> 313  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (117)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 311  
 Met Thr Phe Gly Ser Thr Ile Ser Pro Thr Ser Thr His Ala Ser Pro  
 1 5 10 15  
 Ser Leu Gly Phe Cys Cys Ser Trp Leu Leu Glu Asp Leu Glu Glu Gln  
 20 25 30  
 Leu Tyr Cys Ser Ala Phe Glu Glu Ala Ala Leu Thr Arg Arg Ile Cys  
 35 40 45  
 Asn Pro Thr Ser Cys Trp Leu Pro Leu Asp Met Glu Leu Leu His Arg  
 50 55 60  
 Gln Val Leu Ala Leu Gln Thr Gln Arg Val Leu Leu Gly Met Trp Leu  
 65 70 75 80  
 Arg Arg Ala Trp Asp Thr Trp Val Ser Pro Arg Arg Val Ala Pro Gly  
 85 90 95  
 Ser Arg Cys Leu Leu Thr Ala Ser His Pro Cys Thr Glu Lys Arg Arg  
 100 105 110  
 Lys Ala Ser Ala Xaa Gln Arg Asn Leu Gly Tyr Pro Leu Ala Met Leu  
 115 120 125  
 Cys Leu Leu Val Leu Thr Gly Leu Ser Val Leu Ile Val Ala Ile His  
 130 135 140  
 Ile Leu Glu Leu Leu Ile Asp Glu Ala Ala Met Pro Arg Gly Met Gln  
 145 150 155 160  
 Gly Thr Ser Leu Gly Gln Val Ser Phe Ser Lys Leu Gly Ser Phe Gly  
 165 170 175  
 Ala Val Ile Gln Val Val Leu Ile Phe Tyr Leu Met Val Ser Ser Val  
 180 185 190  
 Val Gly Phe Tyr Ser Ser Pro Leu Phe Arg Ser Leu Arg Pro Arg Trp  
 195 200 205  
 His Asp Thr Ala Met Thr Gln Ile Ile Gly Asn Cys Val Cys Leu Leu  
 210 215 220  
 Val Leu Ser Ser Ala Leu Pro Val Phe Ser Arg Thr Leu Gly Leu Thr  
 225 230 235 240  
 Arg Phe Asp Leu Leu Gly Asp Phe Gly Arg Phe Asn Trp Leu Gly Asn  
 245 250 255

Phe Tyr Ile Val Phe Leu Tyr Asn Ala Ala Phe Ala Gly Leu Thr Thr  
260 265 270

Leu Cys Leu Val Lys Thr Phe Thr Ala Ala Val Arg Ala Glu Leu Ile  
275 280 285

Arg Ala Phe Gly Leu Asp Arg Leu Pro Leu Pro Val Ser Gly Phe Pro  
290 295 300

Gln Ala Ser Arg Lys Thr Gln His Gln  
305 310

<210> 312

<211> 92

<212> PRT

<213> Homo sapiens

<400> 312

Leu Cys Val Cys Leu Val Tyr Leu Cys Met Tyr Gly Val Cys Leu Cys  
1 5 10 15

Val Ile Val Cys Val Ser Gly Val Ser Leu Cys Leu Tyr Val Trp Gly  
20 25 30

Val Ser Val Cys Asp Cys Val Ser Val Phe Met Cys Val Cys Leu Cys  
35 40 45

Val Ile Phe Cys Val Tyr Gly Lys Pro Arg Thr Glu His Tyr His Ser  
50 55 60

Pro His Leu Ala Lys Gln Lys Ala Phe Arg Glu Met Cys Gly Arg His  
65 70 75 80

Asp Val Ser Ala Ala Gly Ile Phe Gln Ser Tyr Val  
85 90

<210> 313

<211> 207

<212> PRT

<213> Homo sapiens

<400> 313

Gly His Met Pro Tyr Gly Trp Leu Thr Glu Ile Arg Ala Val Tyr Pro  
1 5 10 15

Ala Phe Asp Lys Asn Asn Pro Ser Asn Lys Leu Val Ser Thr Ser Asn  
20 25 30

Thr Val Thr Ala Ala His Ile Lys Lys Phe Thr Phe Val Cys Met Ala  
35 40 45

Leu Ser Leu Thr Leu Cys Phe Val Met Phe Trp Thr Pro Asn Val Ser  
50 55 60

Glu Lys Ile Leu Ile Asp Ile Ile Gly Val Asp Phe Ala Phe Ala Glu  
65 70 75 80

Leu Cys Val Val Pro Leu Arg Ile Phe Ser Phe Phe Pro Val Pro Val  
                             85                            90                            95  
 Thr Val Arg Ala His Leu Thr Gly Trp Leu Met Thr Leu Lys Lys Thr  
                             100                            105                            110  
 Phe Val Leu Ala Pro Ser Ser Val Leu Arg Ile Ile Val Leu Ile Ala  
                             115                            120                            125  
 Ser Leu Val Val Leu Pro Tyr Leu Gly Val His Gly Ala Thr Leu Gly  
                             130                            135                            140  
 Val Gly Ser Leu Leu Ala Gly Phe Val Gly Glu Ser Thr Met Val Ala  
                             145                            150                            155                            160  
 Ile Ala Ala Cys Tyr Val Tyr Arg Lys Gln Lys Lys Lys Met Glu Asn  
                             165                            170                            175  
 Glu Ser Ala Thr Glu Gly Glu Asp Ser Ala Met Thr Asp Met Pro Pro  
                             180                            185                            190  
 Thr Glu Glu Val Thr Asp Ile Val Glu Met Arg Glu Glu Asn Glu  
                             195                            200                            205

<210> 314  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 314  
 Gln Val Val Phe Val Ala Ile Leu Leu His Ser His Leu Glu Cys Arg  
   1                            5                            10                            15  
 Glu Pro Leu Leu Ile Pro Ile Leu Ser Leu Tyr Met Gly Ala Leu Val  
                             20                            25                            30  
 Arg Cys Thr Thr Leu Cys Leu Gly Tyr Tyr Lys Asn Ile His Asp Ile  
                             35                            40                            45  
 Ile Pro Asp Arg Ser Gly Pro Glu Leu Gly Gly Asp Ala Thr Ile Arg  
                             50                            55                            60  
 Lys Met Leu Ser Phe Trp Trp Pro Leu Ala Leu Ile Leu Ala Thr Gln  
                             65                            70                            75                            80  
 Arg Ile Ser Arg Pro Ile Val Asn Leu Phe Val Ser Arg Asp Leu Gly  
                             85                            90                            95  
 Gly Ser Ser Ala Ala Thr Glu Ala Val Ala Ile Leu Thr Ala Thr Tyr  
                             100                            105                            110  
 Pro Val

<210> 315  
 <211> 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 315

Arg Cys Cys Cys Arg Gly Cys Ser Cys Arg Ala Arg Leu Cys Pro Pro  
 1 5 10 15

Ala Arg Ser Thr Ala Val Ala Pro Glu Cys Arg Gly Ala His Pro Ser  
 20 25 30

Arg Ala Met Arg Pro Gly Thr Ala Leu Gln Ala Val Leu Leu Ala Val  
 35 40 45

Leu Leu Val Gly Leu Arg Ala Ala Thr Gly Arg Leu Leu Ser Gly Gln  
 50 55 60

Pro Val Cys Arg Gly Gly Thr Gln Arg Pro Cys Tyr Lys Val Ile Tyr  
 65 70 75 80

Phe His Asp Thr Ser Arg Arg Leu Asn Phe Glu Glu Ala Lys Glu Ala  
 85 90 95

Cys Arg Arg Gly Trp Arg Pro Ala Ser Gln His Arg Val Leu Lys Met  
 100 105 110

Asn Arg Asn  
 115

&lt;210&gt; 316

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 316

Met Arg Pro Gly Thr Ala Leu Gln Ala Val Leu Leu Ala Val Leu Leu  
 1 5 10 15

Val Gly Leu Arg Ala Ala Thr Gly Arg Leu Leu Ser Gly Gln Pro Val  
 20 25 30

Cys Arg Gly Gly Thr Gln Arg Pro Cys Tyr Lys Val Ile Tyr Phe His  
 35 40 45

Asp Thr Ser Arg Arg Leu Asn Phe Glu Glu Ala Lys Glu Ala Cys Arg  
 50 55 60

Arg Gly Trp Arg Pro Ala Ser Gln His Arg Val Leu Lys Met Asn Arg  
 65 70 75 80

Asn

&lt;210&gt; 317

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 317

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Ile Arg His Glu Gln Gln Gly Glu Glu Asp Asp Glu His Ala Arg Pro
 1              5              10              15

Leu Ala Glu Ser Leu Leu Leu Ala Ile Ala Asp Leu Leu Phe Cys Pro
          20              25              30

Asp Phe Thr Val Gln Ser His Arg Arg Ser Thr Val Asp Ser Ala Glu
          35              40              45

Asp Val His Ser Leu Asp Ser Cys Glu Tyr Ile Trp Glu Ala Gly Val
          50              55              60

Gly Phe Ala His Ser Pro Gln Pro Asn Tyr Ile His Asp Met Asn Arg
          65              70              75              80

Met Glu Leu Leu Lys Leu Leu Leu Thr Cys Phe Ser Glu Ala Met Tyr
          85              90              95

Leu Pro Pro Ala Pro Glu Ser Gly Ser Thr Asn Pro Trp Val Gln Phe
          100             105             110

Phe Cys Ser Thr Glu Asn Arg His Ala Leu Pro Leu Phe Thr Ser Leu
          115             120             125

Leu Asn Thr Val Cys Ala Tyr Asp Pro Val Gly Tyr Gly Ile Pro Tyr
          130             135             140

Asn His Leu Leu Phe Ser Asp Tyr Arg Glu Pro Leu Val Glu Glu Ala
          145             150             155             160

Ala Gln Val Leu Ile Val Thr Leu Asp His Asp Ser Ala Ser Ser Ala
          165             170             175

Ser Pro Thr Val Asp Gly Thr Thr Thr Gly Thr Ala Met Asp Asp Ala
          180             185             190

Asp Pro Pro Gly Pro Glu Asn Leu Phe Val Asn Tyr Leu Ser Arg Ile
          195             200             205

His Arg Glu Glu Asp Phe Gln Phe Ile Leu Lys Gly Ile Ala Arg Leu
          210             215             220

Leu Ser Asn Pro Leu Leu Gln Thr Tyr Leu Pro Asn Ser Thr Lys Lys
          225             230             235             240

Asp Pro Val Pro Pro Gly Ala Ala Ser Ser Leu Leu Glu Ala Leu Arg
          245             250             255

Leu Gln Gln Glu Ile Pro Leu Leu Arg Ala Glu Glu Gln Arg Arg Pro
          260             265             270

Arg His Pro Cys Pro His Pro Leu Leu Pro Gln Arg Cys Pro Gly Arg
          275             280             285

Ser Val
          290

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<210> 318  
 <211> 318  
 <212> PRT  
 <213> Homo sapiens

<400> 318

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Arg Leu Val Tyr Asn Lys Thr Ser Arg Ala Thr Gln Phe Pro Asp Gly
 1           5           10           15

Val Asp Val Arg Val Pro Gly Phe Gly Lys Thr Phe Ser Leu Glu Phe
          20           25           30

Leu Asp Pro Ser Lys Ser Ser Val Gly Ser Tyr Phe His Thr Met Val
          35           40           45

Glu Ser Leu Val Gly Trp Gly Tyr Thr Arg Gly Glu Asp Val Arg Gly
          50           55           60

Ala Pro Tyr Asp Trp Arg Arg Ala Pro Asn Glu Asn Gly Pro Tyr Phe
          65           70           75           80

Leu Ala Leu Arg Glu Met Ile Glu Glu Met Tyr Gln Leu Tyr Gly Gly
          85           90           95

Pro Val Val Leu Val Ala His Ser Met Gly Asn Met Tyr Thr Leu Tyr
          100          105          110

Phe Leu Gln Arg Gln Pro Gln Ala Trp Lys Asp Lys Tyr Ile Arg Ala
          115          120          125

Phe Val Ser Leu Gly Ala Pro Trp Gly Gly Val Ala Lys Thr Leu Arg
          130          135          140

Val Leu Ala Ser Gly Asp Asn Asn Arg Ile Pro Val Ile Gly Pro Leu
          145          150          155          160

Lys Ile Arg Glu Gln Gln Arg Ser Ala Val Ser Thr Ser Trp Leu Leu
          165          170          175

Pro Tyr Asn Tyr Thr Trp Ser Pro Glu Lys Val Phe Val Gln Thr Pro
          180          185          190

Thr Ile Asn Tyr Thr Leu Arg Asp Tyr Arg Lys Phe Phe Gln Asp Ile
          195          200          205

Gly Phe Glu Asp Gly Trp Leu Met Arg Gln Asp Thr Glu Gly Leu Val
          210          215          220

Glu Ala Thr Met Pro Pro Gly Val Gln Leu His Cys Leu Tyr Gly Thr
          225          230          235          240

Gly Val Pro Thr Pro Asp Ser Phe Tyr Tyr Glu Ser Phe Pro Asp Arg
          245          250          255

Asp Pro Lys Ile Cys Phe Gly Asp Gly Asp Gly Thr Val Asn Leu Lys
          260          265          270

Ser Ala Leu Gln Cys Gln Ala Trp Gln Ser Arg Gln Glu His Gln Val
          275          280          285

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Leu Leu Gln Glu Leu Pro Gly Ser Glu His Ile Glu Met Leu Ala Asn  
 290 295 300

Ala Thr Thr Leu Ala Tyr Leu Lys Arg Val Leu Leu Gly Pro  
 305 310 315

<210> 319

<211> 362

<212> PRT

<213> Homo sapiens

<400> 319

Met Asn Lys Glu Asp Lys Val Trp Asn Asp Cys Lys Gly Val Asn Lys  
 1 5 10 15

Leu Thr Asn Leu Glu Glu Gln Tyr Ile Ile Leu Ile Phe Gln Asn Gly  
 20 25 30

Leu Asp Pro Pro Ala Asn Met Val Phe Glu Ser Ile Ile Asn Glu Ile  
 35 40 45

Gly Ile Lys Asn Asn Ile Ser Asn Phe Phe Ala Lys Ile Pro Phe Glu  
 50 55 60

Glu Ala Asn Gly Arg Leu Val Ala Cys Thr Arg Thr Tyr Glu Glu Ser  
 65 70 75 80

Ile Lys Gly Ser Cys Gly Gln Lys Glu Asn Lys Ile Lys Thr Val Ser  
 85 90 95

Phe Glu Ser Lys Ile Gln Leu Arg Ser Lys Gln Glu Phe Gln Phe Phe  
 100 105 110

Asp Glu Glu Glu Glu Thr Gly Glu Asn His Thr Ile Phe Ile Gly Pro  
 115 120 125

Val Glu Lys Leu Ile Val Tyr Pro Pro Pro Pro Ala Lys Gly Gly Ile  
 130 135 140

Ser Val Thr Asn Glu Asp Leu His Cys Leu Asn Glu Gly Glu Phe Leu  
 145 150 155 160

Asn Asp Val Ile Ile Asp Phe Tyr Leu Lys Tyr Leu Val Leu Glu Lys  
 165 170 175

Leu Lys Lys Glu Asp Ala Asp Arg Ile His Ile Phe Ser Ser Phe Phe  
 180 185 190

Tyr Lys Arg Leu Asn Gln Arg Glu Arg Arg Asn His Glu Thr Thr Asn  
 195 200 205

Leu Ser Ile Gln Gln Lys Arg His Gly Arg Val Lys Thr Trp Thr Arg  
 210 215 220

His Val Asp Ile Phe Glu Lys Asp Phe Ile Phe Val Pro Leu Asn Glu  
 225 230 235 240

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<210> 320
<211> 330
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>  
<221> SITE  
<222> (247)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 320
Met Ser Pro Leu Ser Ala Ala Arg Ala Ala Leu Arg Val Tyr Ala Val
  1             5             10            15
```

Gly Ala Ala Val Ile Leu Ala Gln Leu Leu Arg Arg Cys Arg Gly Gly  
20 25 30

Phe Leu Glu Pro Val Xaa Pro Pro Arg Pro Asp Arg Val Ala Ile Val  
35 40 45

Thr Gly Gly Thr Asp Gly Ile Gly Tyr Ser Thr Ala Asn Ile Trp Arg  
50 55 60

Asp Leu Gly Met His Val Ile Ile Ala Gly Asn Asn Asp Ser Lys Ala  
65 70 75 80

Lys Gln Val Val Ser Lys Ile Lys Glu Glu Thr Leu Asn Asp Lys Val  
85 90 95

Glu Phe Leu Tyr Cys Asp Leu Ala Ser Met Thr Ser Ile Arg Gln Phe  
 100 105 110  
 Val Gln Lys Phe Lys Met Lys Lys Ile Pro Leu His Val Leu Ile Asn  
 115 120 125  
 Asn Ala Gly Val Met Met Val Pro Gln Arg Lys Thr Arg Asp Gly Phe  
 130 135 140  
 Glu Glu His Phe Gly Leu Asn Tyr Leu Gly His Phe Leu Leu Thr Asn  
 145 150 155 160  
 Leu Leu Leu Asp Thr Leu Lys Glu Ser Gly Ser Pro Gly His Ser Ala  
 165 170 175  
 Arg Val Val Thr Val Ser Ser Ala Thr His Tyr Val Ala Glu Leu Asn  
 180 185 190  
 Met Asp Asp Leu Gln Ser Ser Ala Cys Tyr Ser Pro His Ala Ala Tyr  
 195 200 205  
 Ala Gln Ser Lys Leu Ala Leu Val Leu Phe Thr Tyr His Leu Gln Arg  
 210 215 220  
 Leu Leu Ala Ala Glu Gly Ser His Val Thr Ala Asn Val Val Asp Pro  
 225 230 235 240  
 Gly Val Val Asn Thr Asp Xaa Tyr Lys His Val Phe Trp Ala Thr Arg  
 245 250 255  
 Leu Ala Lys Lys Leu Leu Gly Trp Leu Leu Phe Lys Thr Pro Asp Glu  
 260 265 270  
 Gly Ala Trp Thr Ser Ile Tyr Ala Ala Val Thr Pro Glu Leu Glu Gly  
 275 280 285  
 Val Gly Gly Arg Tyr Leu Tyr Asn Glu Lys Glu Thr Lys Ser Leu His  
 290 295 300  
 Val Thr Tyr Asn Gln Lys Leu Gln Gln Gln Leu Trp Ser Lys Ser Cys  
 305 310 315 320  
 Glu Met Thr Gly Val Leu Asp Val Thr Leu  
 325 330

&lt;210&gt; 321

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 321

Met Ser Pro Leu Ser Ala Ala Arg Ala Ala Leu Arg Val Tyr Ala Val  
 1 5 10 15

Gly Ala Ala Val Ile Leu Ala Gln Leu Leu Arg Arg Cys Arg Gly Gly  
                   20                  25                  30  
 Phe Leu Glu Pro Val Xaa Pro Pro Arg Pro Asp Arg Val Ala Ile Val  
                   35                  40                  45  
 Thr Gly Gly Thr Asp Gly Ile Gly Tyr Ser Thr Ala Asn Ile Trp Arg  
                   50                  55                  60  
 Asp Leu Ala Cys Met Leu Ser  
                   65                  70

<210> 322  
 <211> 266  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (97)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (174)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (195)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (199)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (206)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 322  
 Met Glu Val Thr Thr Glu Asp Thr Ser Arg Thr Asp Val Ser Glu Pro  
           1                  5                  10                  15

Ala Thr Ser Gly Gly Ala Ala Asp Gly Val Thr Ser Ile Ala Pro Thr  
                   20                  25                  30

Ala Val Ala Ser Ser Thr Thr Ala Ala Ser Ile Thr Thr Ala Ala Ser  
           35                  40                  45

Ser Met Thr Val Ala Ser Ser Ala Pro Thr Thr Ala Ala Ser Ser Thr  
           50                  55                  60

Thr Val Ala Ser Ile Ala Pro Thr Thr Thr Ala Ser Ser Met Thr Ala  
           65                  70                  75                  80

Ala	Ser	Ser	Thr	Pro	Met	Thr	Leu	Ala	Leu	Pro	Ala	Pro	Thr	Ser	Thr	
				85					90						95	
Xaa	Thr	Gly	Arg	Thr	Pro	Ser	Thr	Thr	Ala	Thr	Gly	His	Pro	Ser	Leu	
			100					105					110			
Ser	Thr	Ala	Leu	Ala	Gln	Val	Pro	Lys	Ser	Ser	Ala	Leu	Pro	Arg	Thr	
		115					120					125				
Ala	Thr	Leu	Ala	Thr	Leu	Ala	Thr	Arg	Ala	Gln	Thr	Val	Ala	Thr	Thr	
		130				135						140				
Ala	Asn	Thr	Ser	Ser	Pro	Met	Ser	Thr	Arg	Pro	Ser	Pro	Ser	Lys	His	
145					150					155					160	
Met	Pro	Ser	Asp	Thr	Ala	Ala	Ser	Pro	Val	Pro	Pro	Met	Xaa	Pro	Gln	
				165					170					175		
Ala	Gln	Gly	Pro	Ile	Ser	Gln	Val	Ser	Val	Asp	Gln	Pro	Val	Val	Asn	
			180					185					190			
Thr	Thr	Xaa	Lys	Ser	Thr	Xaa	Met	Pro	Ser	Asn	Thr	Thr	Xaa	Glu	Pro	
		195					200						205			
Leu	Thr	Gln	Ala	Val	Val	Asp	Lys	Thr	Leu	Leu	Leu	Val	Val	Leu	Leu	
		210				215						220				
Leu	Gly	Val	Thr	Leu	Phe	Ile	Thr	Val	Leu	Val	Leu	Phe	Ala	Leu	Gln	
225					230					235					240	
Ala	Tyr	Glu	Ser	Tyr	Lys	Lys	Lys	Asp	Tyr	Thr	Gln	Val	Asp	Tyr	Leu	
				245					250					255		
Ile	Asn	Gly	Met	Tyr	Ala	Asp	Ser	Glu	Met							
			260					265								
<210> 323																
<211> 99																
<212> PRT																
<213> Homo sapiens																
<400> 323																
Ala	Arg	Cys	Pro	Glu	Leu	Pro	Gly	Leu	Arg	Cys	Arg	Pro	Arg	Pro	Arg	
1				5					10					15		
Ala	Gly	Pro	Gln	Ala	Pro	Ser	Tyr	Cys	Pro	Arg	Ala	Thr	Arg	Pro	Pro	
			20					25					30			
Gly	Ala	Cys	Cys	Ala	Arg	Met	Arg	Leu	Leu	Leu	Glu	Trp	Arg	Val	Tyr	
		35					40					45				

Ser Val Lys Pro Thr Ala Leu Gln Gly Gly Arg Trp Ser Arg Leu Gly  
                     85                    90                    95

Ala Ser Pro

<210> 324

<211> 96

<212> PRT

<213> Homo sapiens

<400> 324

Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln Gln Ser  
   1                    5                    10                    15

Lys Asp Tyr Tyr Ala Tyr Arg Leu Gly His Ile Leu Asn Ser Trp Lys  
                     20                    25                    30

Glu Gln Val Glu Ser Lys Thr Val Phe Ser Met Glu Leu Leu Leu Gly  
                     35                    40                    45

Arg Thr Arg Cys Gly Lys Phe Glu Asp Asp Ile Asp Asn Cys His Phe  
                     50                    55                    60

Gln Glu Ser Thr Glu Leu Asn Asn Thr Phe Thr Cys Phe Phe Thr Ile  
   65                    70                    75                    80

Ser Thr Arg Pro Trp Met Thr Gln Phe Ser Leu Leu Asn Lys Thr Cys  
                     85                    90                    95

<210> 325

<211> 166

<212> PRT

<213> Homo sapiens

<400> 325

Leu Leu Trp Ala Arg Gly Leu Gly Arg Ala Lys Ser Ala Val Pro Thr  
   1                    5                    10                    15

Val Ser Thr Met Leu Gly Leu Pro Trp Lys Gly Gly Leu Ser Trp Ala  
                     20                    25                    30

Leu Leu Leu Leu Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp  
                     35                    40                    45

His Phe His Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg  
                     50                    55                    60

Tyr Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln Gln  
   65                    70                    75                    80

Ser Lys Asp Tyr Tyr Ala Tyr Arg Leu Gly His Ile Leu Asn Ser Trp  
                     85                    90                    95

Lys Glu Gln Val Glu Ser Lys Thr Val Phe Ser Met Glu Leu Leu Leu  
                   100                  105                  110  
 Gly Arg Thr Arg Cys Gly Lys Phe Glu Asp Asp Ile Asp Asn Cys His  
                   115                  120                  125  
 Phe Gln Glu Ser Thr Glu Leu Asn Asn Thr Phe Thr Cys Phe Phe Thr  
                   130                  135                  140  
 Ile Ser Thr Arg Pro Trp Met Thr Gln Phe Ser Leu Leu Asn Lys Thr  
 145                  150                  155                  160  
 Cys Leu Glu Gly Phe His  
                   165

&lt;210&gt; 326

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (200)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (205)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 326

Leu Glu Gln Lys Leu Glu Leu His Arg Gly Gly Gly Arg Ser Arg Thr  
   1                  5                  10                  15  
 Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Arg Glu Glu Arg Gly  
                   20                  25                  30  
 Glu Gly Glu Gln Arg Thr Gly Arg Glu Phe Ser Gly Asn Gly Gly Arg  
                   35                  40                  45  
 Ala Val Glu Ala Ala Arg Met Arg Leu Leu Cys Gly Leu Trp Leu Trp  
                   50                  55                  60  
 Leu Ser Leu Leu Lys Val Leu Gln Ala Gln Thr Pro Thr Pro Leu Pro  
 65                  70                  75                  80  
 Leu Pro Pro Pro Met Gln Ser Phe Gln Gly Asn Gln Phe Gln Gly Glu  
                   85                  90                  95  
 Trp Phe Val Leu Gly Leu Ala Gly Asn Ser Phe Arg Pro Glu His Arg  
                   100                  105                  110  
 Ala Leu Leu Asn Ala Phe Thr Ala Thr Phe Glu Leu Ser Asp Asp Gly  
                   115                  120                  125  
 Arg Phe Glu Val Trp Asn Ala Met Thr Arg Gly Gln His Cys Asp Thr  
                   130                  135                  140

Trp Ser Tyr Val Leu Ile Pro Ala Ala Gln Pro Gly Gln Phe Thr Val  
145 150 155 160

Asp His Gly Val Gly Arg Ser Trp Leu Leu Pro Pro Gly Thr Leu Asp  
165 170 175

Gln Phe Ile Cys Leu Gly Arg Ala Gln Gly Leu Ser Asp Asp Asn Ile  
180 185 190

Val Phe Pro Asp Val Thr Gly Xaa Ala Leu Asp Leu Xaa Ser Leu Pro  
195 200 205

Trp Val Ala Ala Pro Ala  
210

<210> 327

<211> 181

<212> PRT

<213> Homo sapiens

<400> 327

Met Cys Val Cys Glu Arg Lys Arg Gly Arg Glu Lys Glu Gly Gly Val  
1 5 10 15

Thr Pro Thr Met Thr Ser Asn Phe Pro Phe Cys Thr Leu Ile Leu Gly  
20 25 30

Ile Ala Gln Ala Gln Ala Cys Pro Gly Cys Pro Gly Asp Trp Pro Gly  
35 40 45

Leu Gly Ser Gly Val Gly Glu Gly Leu His His Ile Arg Thr Cys Arg  
50 55 60

Thr Pro Ile Pro Cys Ser Pro Pro Ala Pro Ala Ala Ala Cys Leu Gly  
65 70 75 80

Ser Gly His Ala Arg Leu Pro Cys Val Leu Arg Leu Trp Pro Val Pro  
85 90 95

Ala Asn Leu Ser Ser Pro Phe Arg Leu Glu Ala Leu His Cys Ser Phe  
100 105 110

Trp Ser Ser Pro Leu Leu Pro Ala Pro His Leu Ala Phe Phe Gly Phe  
115 120 125

Arg Asp Leu Leu Thr Asp Phe Leu Leu Ala Ala Cys Leu Leu Thr Phe  
130 135 140

Gln Lys Thr Pro Leu Glu Leu Pro Met Ala Val Val His Leu Leu Val  
145 150 155 160

Ala Thr Pro Cys Tyr Gln Met Leu Asp Asn Leu Pro Leu Pro Ser Ala  
165 170 175

Ala Ala Asn Trp Cys  
180

<210> 328  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<400> 328  
 Tyr Leu Trp Gly Arg Pro Arg Leu Arg Met Arg Ala Gly Thr Ser Pro  
 1 5 10 15  
 Ser Ala Pro Trp Gly Glu Lys Arg Glu Lys Leu Gly His Lys Leu Pro  
 20 25 30  
 Val Ala Leu Gln Gly Tyr His Pro Trp Ile Leu Leu Glu Cys Thr Val  
 35 40 45  
 Phe Trp Ala Arg Val Val Leu Ala Cys Phe Ser Leu Tyr Leu Ile Arg  
 50 55 60  
 Gly Pro Asn Cys Ile Asn Arg Gln Pro Glu Pro Thr Tyr Gln Lys Ala  
 65 70 75 80  
 Cys Asn Leu Asp Cys Ser Ser Asp Phe Gly Gln Glu Arg Ala Pro Ala  
 85 90 95  
 Trp Glu Leu Leu Gly Pro Glu Ser Glu Gln Arg Leu Arg Glu Tyr Thr  
 100 105 110  
 Ala Gln Gly Leu Gln Ser Leu Ala Ser Ser His Arg Trp Arg Gln Phe  
 115 120 125  
 Lys Thr Glu Gly Lys Met Arg Gly Gly Ala Ser Pro Leu Pro Trp Leu  
 130 135 140  
 Ile Cys Phe Trp Leu Cys Ser Tyr Lys Gly Ser Asp Asn Ser Leu Lys  
 145 150 155 160  
 Pro Val Val Pro Gly Pro Thr Leu Cys Pro Gln Ser Leu Val Ser Pro  
 165 170 175  
 Ser Val His Pro Ser Thr Arg Ser Ala Ser Leu Gly Arg His Arg Ala  
 180 185 190  
 Glu Ala Ala  
 195

<210> 329  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 329  
 Met Pro Gly Ile Leu Ala Gly Ile Pro Val Lys Asp Leu Cys Leu Ser  
 1 5 10 15  
 Leu Leu Gln Gly Phe Arg Leu Leu Leu Leu Cys Val Cys Pro Gly Trp  
 20 25 30  
 Leu Ser Gly Trp Met Gly Gly Gln Lys Gly Ser Pro Arg Ile Val Asp

35

40

45

Ile Gly  
50

<210> 330  
<211> 90  
<212> PRT  
<213> Homo sapiens

<400> 330  
Ala Lys Gly Glu Glu Arg Lys Glu Ala Phe Ser Leu Lys Met Val Gln  
1 5 10 15  
Leu Ser Ser Glu Pro Ile Ser Phe Gly Leu Met Tyr Leu Tyr Leu Gly  
20 25 30  
Val Phe Phe His Leu Ile Tyr Pro Gly Ala Leu Ser Ile Thr Thr Leu  
35 40 45  
Gly Lys His Ser His Pro Phe Phe Thr Ala Glu Gln Asn Ser Thr Val  
50 55 60  
Trp Met Glu His Thr Leu Phe His Gln Ser Pro Val Ala Ser His Leu  
65 70 75 80  
Val Cys Phe Gln Ser Phe Ala Phe Ser Glu  
85 90

<210> 331  
<211> 56  
<212> PRT  
<213> Homo sapiens

<400> 331  
Gly Pro Ala His Pro Ala Ser Pro Pro Leu Met Thr Leu Ser Leu Gln  
1 5 10 15  
Leu Ala Glu Leu Val His Phe Val Cys Ala Phe Gln Ser Gln Trp Thr  
20 25 30  
Gly Val Tyr Pro Met Met Pro Pro Leu Lys Pro Thr Glu Pro Leu Cys  
35 40 45  
Phe Ala Cys Val Pro Cys Arg Val  
50 55

<210> 332  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 332  
Met Leu Leu Glu Val Tyr Gly Asp Ser Ile Ser Val Thr Val Ala Ile  
1 5 10 15

Pro Leu

&lt;210&gt; 333

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 333

Met	His	Ser	Pro	Cys	Gln	Ser	Lys	Ala	Ala	Asp	Gly	Leu	Gly	Lys	Ser
1				5					10					15	

Glu Thr Glu

&lt;210&gt; 334

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 334

Met	Leu	Lys	Ser	Leu	Gly	Leu	Ser	Thr	Asn
1				5				10	

&lt;210&gt; 335

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 335

Ala	Gln	Arg	Leu	Ala	Glu	Glu	Cys	Phe	Tyr	Met	Leu	Leu	Glu	Val	Tyr
1				5					10					15	

Gly	Asp	Ser	Ile	Ser	Val	Thr	Val	Ala	Ile	Pro	Leu	Met	His	Ser	Pro
			20					25					30		

Cys	Gln	Ser	Lys	Ala	Ala	Asp	Gly	Leu	Gly	Lys	Ser	Glu	Thr	Glu	Met
			35				40						45		

Leu	Lys	Ser	Leu	Gly	Leu	Ser	Thr	Asn	Met	Ser	Pro	Phe	His	Leu	Leu
	50					55					60				

Gly	Leu	Lys	Val	Phe	Leu	Thr	Trp	Ala	Leu	Thr	Leu	Ala	Gln	Ile	Cys
65					70					75					80

Leu	Tyr	Phe	Phe	Glu	Val	Gln	Pro	Leu	Gly	Leu	Leu	Ala	Leu	Asn	Phe
				85					90					95	

Phe	Cys	Thr	Ala	Thr	Ala	Gly	Leu	Lys	Glu	Leu	Cys	Met	His	Pro	Pro
			100					105						110	

Ser	Leu	Ala	Phe	Thr	Pro	Glu	Phe	His	Thr	Ser	Leu	Ser	Pro	Leu	Ala
		115					120					125			

Ile	Pro	Ser	Phe	Cys	Gly	Thr	Ser	Val	Ser	Leu	Ser	Asn	Ser	His	Thr
	130					135						140			

Ile Pro Leu Ser Leu Tyr Leu Pro Phe Pro Ser Lys Ser Arg Met Pro  
145 150 155 160

Asp Thr Leu His Leu Leu Val His Ser Leu Pro Leu Val His Ser Gln  
165 170 175

Val Leu Pro Val Lys Asp Val Thr Ile Glu Trp Pro Leu Cys Gln Arg  
180 185 190

Cys Leu Gly Ser Thr Cys His Gln  
195 200

<210> 336

<211> 99

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (94)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 336

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Val Gln Val Ser Leu  
1 5 10 15

Phe Gln Met Phe Cys Phe Ser Ser Ile Phe Cys Ser His Glu His Thr  
20 25 30

His Leu Pro Gly Thr Phe Trp Leu Phe Leu Phe Leu Phe Leu Ile Leu  
35 40 45

Pro Pro Ser Cys Pro Cys Phe Leu Pro Phe Ser Leu Ala Ile Glu Thr  
50 55 60

Val Arg Trp Pro Cys Trp His His Pro Thr Ser Phe Glu Leu Cys Tyr  
65 70 75 80

Pro Gly Thr Ser Ile Tyr Tyr Ala Ser Arg Gly Gly Pro Xaa Pro Asn  
85 90 95

Ser Glu Xaa

<210> 337

<211> 96

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 337

Xaa	Asn	Xaa	Lys	Ser	Pro	Leu	Thr	Ile	Gly	Asn	Lys	Ser	Trp	Ser	Ser
1				5					10					15	

Thr	Ala	Val	Ala	Ala	Ala	Leu	Glu	Leu	Val	Asp	Pro	Pro	Gly	Cys	Arg
		20						25					30		

Asn	Ser	Ala	Arg	Asp	Ser	Pro	Glu	Leu	Val	His	Leu	Gly	Lys	Gly	Arg
	35						40					45			

Pro	Arg	Lys	Leu	Met	Thr	Tyr	Leu	Phe	Cys	Ser	Ser	Ile	Ser	Leu	Leu
	50					55					60				

Leu	Leu	Lys	Val	His	Ser	Ser	Gly	His	Gln	Asp	Ile	Arg	Lys	Ala	Lys
65					70					75					80

Ser	Lys	Val	Pro	Arg	Leu	Leu	Ile	Ile	Gln	Cys	Pro	Gln	Gln	Arg	Glu
				85					90						95

&lt;210&gt; 338

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 338

Gly	Pro	Glu	Glu	Asn	Leu	Ser	Pro	Ser	Thr	Pro	Ser	Gln	Met	Pro	Thr
1				5					10					15	

Ile	Trp	Val	Lys	Leu	Cys	Leu	Leu	Gln	Val	Cys	His	Gly	Leu	Phe	Pro
		20						25					30		

Leu	Leu	Lys	His	Trp	Ser	Gln	Pro	Met	Pro	Leu	Cys	Val	Thr	Leu	Ala
		35					40					45			

Pro	Val	Ser	Tyr	Trp	Leu
	50				

&lt;210&gt; 339

&lt;211&gt; 287

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 339

Pro	Arg	Val	Arg	Lys	Glu	Pro	Glu	Ala	Met	Gln	Trp	Leu	Arg	Val	Arg
1				5					10					15	

225

Glu Ser Pro Gly Glu Ala Thr Gly His Arg Val Thr Met Gly Thr Ala  
                   20                                  25                                  30  
 Ala Leu Gly Pro Val Trp Ala Ala Leu Leu Leu Phe Leu Leu Met Cys  
                   35                                  40                                  45  
 Glu Ile Pro Met Val Glu Leu Thr Phe Asp Arg Ala Val Ala Ser Asp  
                   50                                  55                                  60  
 Cys Gln Arg Cys Cys Asp Ser Glu Asp Pro Leu Asp Pro Ala His Val  
                   65                                  70                                  75                                  80  
 Ser Ser Ala Ser Ser Ser Gly Arg Pro His Ala Leu Pro Glu Ile Arg  
                                   85                                  90                                  95  
 Pro Tyr Ile Asn Ile Thr Ile Leu Lys Gly Asp Lys Gly Asp Pro Gly  
                   100                                  105                                  110  
 Pro Met Gly Leu Pro Gly Tyr Met Gly Arg Glu Gly Pro Gln Gly Glu  
                   115                                  120                                  125  
 Pro Gly Pro Gln Gly Ser Lys Gly Asp Lys Gly Glu Met Gly Ser Pro  
                   130                                  135                                  140  
 Gly Ala Pro Cys Gln Lys Arg Phe Phe Ala Phe Ser Val Gly Arg Lys  
                   145                                  150                                  155                                  160  
 Thr Ala Leu His Ser Gly Glu Asp Phe Gln Thr Leu Leu Phe Glu Arg  
                                   165                                  170                                  175  
 Val Phe Val Asn Leu Asp Gly Cys Phe Asp Met Ala Thr Gly Gln Phe  
                   180                                  185                                  190  
 Ala Ala Pro Leu Arg Gly Ile Tyr Phe Phe Ser Leu Asn Val His Ser  
                   195                                  200                                  205  
 Trp Asn Tyr Lys Glu Thr Tyr Val His Ile Met His Asn Gln Lys Glu  
                   210                                  215                                  220  
 Ala Val Ile Leu Tyr Ala Gln Pro Ser Glu Arg Ser Ile Met Gln Ser  
                   225                                  230                                  235                                  240  
 Gln Ser Val Met Leu Asp Leu Ala Tyr Gly Asp Arg Val Trp Val Arg  
                   245                                  250                                  255  
 Leu Phe Lys Arg Gln Arg Glu Asn Ala Ile Tyr Ser Asn Asp Phe Asp  
                   260                                  265                                  270  
 Thr Tyr Ile Thr Phe Ser Gly His Leu Ile Lys Ala Glu Asp Asp  
                   275                                  280                                  285

&lt;210&gt; 340

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 340

Met Leu Tyr Pro Gly Ser Val Tyr Leu Leu Gln Lys Ala Leu Met Pro

226

1	5	10	15
Val Leu Leu Gln Gly Gln Ala Arg Leu Val Glu Glu Cys Asn Gly Arg	20	25	30
Arg Ala Lys Leu Leu Ala Cys Asp Gly Asn Glu Ile Asp Thr Met Phe	35	40	45
Val Asp Arg Arg Gly Thr Ala Glu Pro Gln Gly Gln Lys Leu Val Ile	50	55	60
Cys Cys Glu Gly Asn Ala Gly Phe Tyr Glu Val Gly Cys Val Ser Thr	65	70	75
Pro Leu Glu Ala Gly Tyr Ser Val Leu Gly Trp Asn His Pro Gly Phe	85	90	95
Ala Gly Ser Thr Gly Val Pro Phe Pro Gln Asn Glu Ala Asn Ala Met	100	105	110
Asp Val Val Val Gln Phe Ala Ile His Arg Leu Gly Phe Gln Pro Gln	115	120	125
Asp Ile Ile Ile Tyr Ala Trp Ser Ile Gly Gly Phe Thr Ala Thr Trp	130	135	140
Ala Ala Met Ser Tyr Pro Asp Val Ser Ala Met Ile Leu Asp Ala Ser	145	150	155
Phe Asp Asp Leu Val Pro Leu Ala Leu Lys Val Met Pro Asp Ser Trp	165	170	175
Arg Gly Leu Val Thr Arg Thr Val Arg Gln His Leu Asn Leu Asn Asn	180	185	190
Ala Glu Gln Leu Cys Arg Tyr Gln Gly Pro Val Leu Leu Ile Arg Arg	195	200	205
Thr Lys Asp Glu Ile Ile Thr Thr Thr Val Pro Glu Asp Ile Met Ser	210	215	220
Asn Arg Gly Asn Asp Leu Leu Leu Lys Leu Leu Gln His Arg Tyr Pro	225	230	235
Arg Val Met Ala Glu Glu Gly Leu Arg Val Val Arg Gln Trp Leu Glu	245	250	255
Ala Ser Ser Gln Leu Glu Glu Ala Ser Ile Tyr Ser Arg Trp Glu Val	260	265	270
Glu Glu Asp Trp Cys Leu Ser Val Leu Arg Ser Tyr Gln Ala Glu His	275	280	285
Gly Pro Asp Phe Pro Trp Ser Val Gly Glu Asp Met Ser Ala Asp Gly	290	295	300
Arg Arg Gln Leu Ala Leu Phe Leu Ala Arg Lys His Leu His Asn Phe	305	310	315
			320

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<210> 341
<211> 127
<212> PRT
<213> Homo sapiens
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Arg Ser Cys Leu Val Arg Ser Pro Ala Thr Trp Trp Arg Thr Pro  
115 120 125

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<210> 342
<211> 554
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 342  
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Ile Tyr Arg Glu Xaa  
1 5 10 15

Asp Ser Glu Arg Ala Pro Ala Ser Val Pro Glu Thr Pro Thr Ala Val  
20 25 30

Thr Ala Pro His Ser Ser Ser Trp Asp Thr Tyr Tyr Gln Pro Arg Ala  
 35 40 45  
 Leu Glu Lys His Ala Asp Ser Ile Leu Ala Leu Ala Ser Val Phe Trp  
 50 55 60  
 Ser Ile Ser Tyr Tyr Ser Ser Pro Phe Ala Phe Phe Tyr Leu Tyr Arg  
 65 70 75 80  
 Lys Gly Tyr Leu Ser Leu Ser Lys Val Val Pro Phe Ser His Tyr Ala  
 85 90 95  
 Gly Thr Leu Leu Leu Leu Leu Ala Gly Val Ala Cys Xaa Arg Gly Ile  
 100 105 110  
 Gly Arg Trp Thr Asn Pro Gln Tyr Arg Gln Phe Ile Thr Ile Leu Glu  
 115 120 125  
 Ala Thr His Arg Asn Gln Ser Ser Glu Asn Lys Arg Gln Leu Ala Asn  
 130 135 140  
 Tyr Asn Phe Asp Phe Arg Ser Trp Pro Val Asp Phe His Trp Glu Glu  
 145 150 155 160  
 Pro Ser Ser Arg Lys Glu Ser Arg Gly Gly Pro Ser Arg Arg Gly Val  
 165 170 175  
 Ala Leu Leu Arg Pro Glu Pro Leu His Arg Gly Thr Ala Asp Thr Leu  
 180 185 190  
 Leu Asn Arg Val Lys Lys Leu Pro Cys Gln Ile Thr Ser Tyr Leu Val  
 195 200 205  
 Ala His Thr Leu Gly Arg Arg Met Leu Tyr Pro Gly Ser Val Tyr Leu  
 210 215 220  
 Leu Gln Lys Ala Leu Met Pro Val Leu Leu Gln Gly Gln Ala Arg Leu  
 225 230 235 240  
 Val Glu Glu Cys Asn Gly Arg Arg Ala Lys Leu Leu Ala Cys Asp Gly  
 245 250 255  
 Asn Glu Ile Asp Thr Met Phe Val Asp Arg Arg Gly Thr Ala Glu Pro  
 260 265 270  
 Gln Gly Gln Lys Leu Val Ile Cys Cys Glu Gly Asn Ala Gly Phe Tyr  
 275 280 285  
 Glu Val Gly Cys Val Ser Thr Pro Leu Glu Ala Gly Tyr Ser Val Leu  
 290 295 300  
 Gly Trp Asn His Pro Gly Phe Ala Gly Ser Thr Gly Val Pro Phe Pro  
 305 310 315 320  
 Gln Asn Glu Ala Asn Ala Met Asp Val Val Val Gln Phe Ala Ile His  
 325 330 335  
 Arg Leu Gly Phe Gln Pro Gln Asp Ile Ile Ile Tyr Ala Trp Ser Ile

340	345	350
Gly Gly Phe Thr Ala Thr Trp Ala Ala Met Ser Tyr Pro Asp Val Ser		
355	360	365
Ala Met Ile Leu Asp Ala Ser Phe Asp Asp Leu Val Pro Leu Ala Leu		
370	375	380
Lys Val Met Pro Asp Ser Trp Arg Gly Leu Val Thr Arg Thr Val Arg		
385	390	395
Gln His Leu Asn Leu Asn Asn Ala Glu Gln Leu Cys Arg Tyr Gln Gly		
405	410	415
Pro Val Leu Leu Ile Arg Arg Thr Lys Asp Glu Ile Ile Thr Thr Thr		
420	425	430
Val Pro Glu Asp Ile Met Ser Asn Arg Gly Asn Asp Leu Leu Leu Lys		
435	440	445
Leu Leu Gln His Arg Tyr Pro Arg Val Met Ala Glu Glu Gly Leu Arg		
450	455	460
Val Val Arg Gln Trp Leu Glu Ala Ser Ser Gln Leu Glu Glu Ala Ser		
465	470	475
Ile Tyr Ser Arg Trp Glu Val Glu Glu Asp Trp Cys Leu Ser Val Leu		
485	490	495
Arg Ser Tyr Gln Ala Glu His Gly Pro Asp Phe Pro Trp Ser Val Gly		
500	505	510
Glu Asp Met Ser Ala Asp Gly Arg Arg Gln Leu Ala Leu Phe Leu Ala		
515	520	525
Arg Lys His Leu His Asn Phe Glu Ala Thr His Cys Thr Pro Leu Pro		
530	535	540
Ala Gln Asn Phe Gln Met Pro Trp His Leu		
545	550	

&lt;210&gt; 343

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 343

His	Glu	Arg	Ala	Xaa	Gly	Pro	Ser	Arg	Gly	His	Gly	Glu	Leu	Leu	Ser
1					5				10						15

Cys	Val	Leu	Gly	Pro	Arg	Leu	Tyr	Lys	Ile	Tyr	Arg	Glu	Arg	Asp	Ser
			20					25						30	

Glu Arg Ala Pro Ala Ser Val Pro Glu Thr Pro Thr Ala Val Thr Ala  
           35                          40                          45  
 Pro His Ser Ser Ser Trp Asp Thr Tyr Tyr Gln Pro Arg Ala Leu Glu  
           50                          55                          60  
 Lys His Ala Asp Ser Ile Leu Ala Leu Ala Ser Val Phe Trp Ser Ile  
           65                          70                          75                          80  
 Ser Tyr Tyr Ser Ser Pro Phe Ala Phe Phe Tyr Leu Tyr Arg Lys Gly  
                           85                          90                          95  
 Tyr Leu Ser Leu Ser Lys Val Val Pro Phe Ser His Tyr Ala Gly Thr  
                           100                          105                          110  
 Leu Leu Leu Leu Leu Ala Gly Val Ala Cys Ser Glu Ala Leu Ala Ala  
           115                          120                          125  
 Gly Pro Thr Pro Ser Thr Gly Ser Ser Ser Pro Ser Trp Lys Gln His  
           130                          135                          140  
 Ile Gly Thr Ser Leu Gln Lys Thr Arg Gly Ser Leu Pro Thr Thr Thr  
           145                          150                          155                          160  
 Leu Thr Ser Gly Ala Gly Gln Ser Thr Ser Thr Gly Lys Asn Pro Ala  
                           165                          170                          175  
 Ala Gly Arg Ser Leu Glu Gly Ala Leu Pro Ala Gly Val Trp Pro Cys  
                           180                          185                          190  
 Phe Ala Gln Ser Pro Cys Thr Gly Gly Gln Gln Thr Pro Ser Ser Thr  
           195                          200                          205  
 Gly Leu Arg Ser Cys Leu Val Arg Ser Pro Ala Thr Trp Trp Arg Thr  
           210                          215                          220  
 Pro  
 225

<210> 344  
 <211> 299  
 <212> PRT  
 <213> Homo sapiens

<400> 344  
 Met Phe Lys Arg His Gln Arg Leu Lys Lys Asp Ser Thr Gln Ala Glu  
   1                          5                          10                          15  
 Glu Asp Leu Ser Glu Gln Glu Gln Asn Gln Leu Asn Val Leu Lys Lys  
           20                          25                          30  
 His Gly Tyr Val Val Gly Arg Val Gly Arg Thr Phe Leu Tyr Ser Glu  
           35                          40                          45  
 Glu Gln Lys Asp Asn Ile Pro Phe Glu Phe Asp Ala Asp Ser Leu Ala  
           50                          55                          60  
 Phe Asp Met Glu Asn Asp Pro Val Met Gly Thr His Lys Ser Thr Lys

65		70		75		80
Gln Val Glu Leu Thr Ala Gln Asp Val Lys Asp Ala His Trp Phe Tyr						
	85			90		95
Asp Thr Pro Gly Ile Thr Lys Glu Asn Cys Ile Leu Asn Leu Leu Thr						
	100		105			110
Glu Lys Glu Val Asn Ile Val Leu Pro Thr Gln Ser Ile Val Pro Arg						
	115		120			125
Thr Phe Val Leu Lys Pro Gly Met Val Leu Phe Leu Gly Ala Ile Gly						
	130		135			140
Arg Ile Asp Phe Leu Gln Gly Asn Gln Ser Ala Trp Phe Thr Val Val						
	145		150		155	160
Ala Ser Asn Ile Leu Pro Val His Ile Thr Ser Leu Asp Arg Ala Asp						
	165		170			175
Ala Leu Tyr Gln Lys His Ala Gly His Thr Leu Leu Gln Ile Pro Met						
	180		185			190
Gly Gly Lys Glu Arg Met Ala Gly Phe Pro Pro Leu Val Ala Glu Asp						
	195		200			205
Ile Met Leu Lys Glu Gly Leu Gly Ala Ser Glu Ala Val Ala Asp Ile						
	210		215			220
Lys Phe Ser Ser Ala Gly Trp Val Ser Val Thr Pro Asn Phe Lys Asp						
	225		230		235	240
Arg Leu His Leu Arg Gly Tyr Thr Pro Glu Gly Thr Val Leu Thr Val						
	245		250			255
Arg Pro Pro Leu Leu Pro Tyr Ile Val Asn Ile Lys Gly Gln Arg Ile						
	260		265			270
Lys Lys Ser Val Ala Tyr Lys Thr Lys Lys Pro Pro Ser Leu Met Tyr						
	275		280			285
Asn Val Arg Lys Lys Lys Gly Lys Ile Asn Val						
	290		295			

&lt;210&gt; 345

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (147)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (211)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 345

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Met Leu Pro Ala Arg Leu Pro Phe Arg Leu Leu Ser Leu Phe Leu Arg
 1             5             10             15

Gly Ser Ala Pro Thr Ala Ala Arg His Gly Leu Arg Glu Pro Leu Leu
          20             25             30

Glu Arg Arg Cys Ala Ala Ala Ser Ser Phe Gln His Ser Ser Ser Leu
          35             40             45

Gly Arg Glu Leu Pro Tyr Asp Pro Val Asp Thr Glu Gly Phe Gly Glu
          50             55             60

Gly Gly Asp Met Gln Glu Arg Phe Leu Phe Pro Glu Tyr Ile Leu Asp
          65             70             75             80

Pro Glu Pro Gln Pro Thr Arg Glu Lys Gln Leu Gln Glu Leu Gln Gln
          85             90             95

Gln Gln Glu Glu Glu Glu Arg Gln Arg Gln Gln Arg Arg Glu Glu Arg
          100             105             110

Arg Gln Gln Asn Leu Arg Ala Arg Ser Arg Glu His Pro Val Val Gly
          115             120             125

His Pro Asp Pro Ala Leu Pro Pro Ser Gly Val Asn Cys Ser Gly Cys
          130             135             140

Gly Ala Xaa Leu His Cys Gln Asp Ala Gly Val Pro Gly Tyr Leu Pro
          145             150             155             160

Arg Glu Lys Phe Leu Arg Thr Ala Glu Ala Asp Gly Gly Leu Ala Arg
          165             170             175

Thr Val Cys Gln Arg Cys Trp Leu Leu Ser His His Arg Arg Ala Leu
          180             185             190

Arg Leu Gln Val Ser Arg Glu Gln Tyr Leu Glu Leu Val Ser Ala Ala
          195             200             205

Leu Arg Xaa Pro Gly Pro Ser Leu Val Leu Tyr Met Val Asp Leu Leu
          210             215             220

Asp Leu Pro Asp Ala Leu Leu Pro Asp Leu Pro Ala Leu Val Gly Pro
          225             230             235             240

Lys Gln Leu Ile Val Leu Gly Asn Lys Val Asp Leu Leu Pro Gln Asp
          245             250             255

Ala Pro Gly Tyr Arg Gln Arg Leu Arg Glu Arg Leu Trp Glu Asp Cys
          260             265             270

Ala Arg Ala Gly Leu Leu Leu Ala Pro Gly Thr Lys Gly His Ser Ala
          275             280             285

Pro Ser Arg Thr Ser His Arg Thr Gly Arg Ile Arg Ile Arg Arg Thr
          290             295             300

```

Gly Pro Ala Gln Trp Ser Gly Thr Cys Gly  
305 310

<210> 346

<211> 380

<212> PRT

<213> Homo sapiens

<400> 346

Pro Ser Phe Arg Arg Glu Arg Val Glu Thr Gly Gly Gly Gly Pro Val  
1 5 10 15

Thr His Gly Thr Glu Gly Pro Phe Leu Pro Leu Pro Gly Gly Thr Arg  
20 25 30

Met Asn Met Thr Gln Ala Arg Val Leu Val Ala Ala Val Val Gly Leu  
35 40 45

Val Ala Val Leu Leu Tyr Ala Ser Ile His Lys Ile Glu Glu Gly His  
50 55 60

Leu Ala Val Tyr Tyr Arg Gly Gly Ala Leu Leu Thr Ser Pro Ser Gly  
65 70 75 80

Pro Gly Tyr His Ile Met Leu Pro Phe Ile Thr Thr Phe Arg Ser Val  
85 90 95

Gln Thr Thr Leu Gln Thr Asp Glu Val Lys Asn Val Pro Cys Gly Thr  
100 105 110

Ser Gly Gly Val Met Ile Tyr Ile Asp Arg Ile Glu Val Val Asn Met  
115 120 125

Leu Ala Pro Tyr Ala Val Phe Asp Ile Val Arg Asn Tyr Thr Ala Asp  
130 135 140

Tyr Asp Lys Thr Leu Ile Phe Asn Lys Ile His His Glu Leu Asn Gln  
145 150 155 160

Phe Cys Ser Ala His Thr Leu Gln Glu Val Tyr Ile Glu Leu Phe Asp  
165 170 175

Gln Ile Asp Glu Asn Leu Lys Gln Ala Leu Gln Lys Asp Leu Asn Leu  
180 185 190

Met Ala Pro Gly Leu Thr Ile Gln Ala Val Arg Val Thr Lys Pro Lys  
195 200 205

Ile Pro Glu Ala Ile Arg Arg Asn Phe Glu Leu Met Glu Ala Glu Lys  
210 215 220

Thr Lys Leu Leu Ile Ala Ala Gln Lys Gln Lys Val Val Glu Lys Glu  
225 230 235 240

Ala Glu Thr Glu Arg Lys Lys Ala Val Ile Glu Ala Glu Lys Ile Ala  
245 250 255

Gln Val Ala Lys Ile Arg Phe Gln Gln Lys Val Met Glu Lys Glu Thr

Leu Glu Ser Val Asn Lys Leu Tyr Gln Asp Glu Lys Ala Val Leu Val  
115 120 125

235

Asn Asn Ile Thr Thr Gly Glu Arg Leu Ile Arg Val Leu Gln Asp Gln  
 130 135 140  
 Leu Lys Thr Leu Gln Arg Asn Tyr Gly Arg Leu Gln Gln Asp Val Leu  
 145 150 155 160  
 Gln Phe Gln Lys Asn Gln Thr Asn Leu Glu Arg Lys Phe Ser Tyr Asp  
 165 170 175  
 Leu Ser Gln Cys Ile Asn Gln Met Lys Glu Val Lys Glu Gln Cys Glu  
 180 185 190  
 Glu Arg Ile Glu Glu Val Thr Lys Lys Gly Asn Glu Ala Val Ala Ser  
 195 200 205  
 Arg Asp Leu Ser Glu Asn Asn Asp Gln Arg Gln Gln Leu Gln Ala Leu  
 210 215 220  
 Ser Glu Pro Gln Pro Arg Leu Gln Ala Ala Gly Leu Pro His Thr Glu  
 225 230 235 240  
 Val Pro Gln Gly Lys Gly Asn Val Leu Gly Asn Ser Lys Ser Gln Thr  
 245 250 255  
 Pro Ala Pro Ser Ser Glu Val Val Leu Asp Ser Lys Arg Gln Val Glu  
 260 265 270  
 Lys Glu Glu Thr Asn Glu Ile Gln Val Val Asn Glu Glu Pro Gln Arg  
 275 280 285  
 Asp Arg Leu Pro Gln Glu Pro Gly Arg Glu Gln Val Val Glu Asp Arg  
 290 295 300  
 Pro Val Gly Gly Arg Gly Phe Gly Gly Ala Gly Glu Leu Gly Gln Thr  
 305 310 315 320  
 Pro Gln Val Gln Ala Ala Leu Xaa Val Ser Gln Glu Asn Pro Glu Met  
 325 330 335  
 Glu Gly Pro Glu Arg Asp Gln Leu Val Ile Pro Asp Gly Gln Glu Glu  
 340 345 350  
 Glu Gln Glu Ala Ala Gly Glu Gly Arg Asn Gln Gln Lys Leu Arg Gly  
 355 360 365  
 Glu Asp Asp Tyr Asn Met Asp Glu Asn Glu Ala Glu Ser Glu Thr Asp  
 370 375 380  
 Lys Gln Ala Ala Leu Ala Gly Asn Asp Arg Asn Ile Asp Val Phe Asn  
 385 390 395 400  
 Val Glu Asp Gln Lys Arg Asp Thr Ile Asn Leu Leu Asp Gln Arg Glu  
 405 410 415  
 Lys Arg Asn His Thr Leu  
 420

&lt;210&gt; 348

<211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 348  
 Ser Leu His Arg Phe Val Leu Ser Gln Ala Lys Asp Glu Leu  
           1                  5                  10

<210> 349  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 349  
 Phe Ile Lys Phe Phe Ala Pro Trp Cys Gly His Cys Lys Ala Leu Ala  
           1                  5                  10                  15

Pro Thr Trp

<210> 350  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 350  
 Phe Ile Lys Phe Tyr Ala Pro Trp Cys Gly His Cys Lys Thr Leu Ala  
           1                  5                  10                  15

Pro Thr Trp

<210> 351  
 <211> 363  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (42)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 351  
 Arg Arg Gly Arg Gly Val Pro Gly Pro Arg Gly Arg Arg Arg Leu Trp  
           1                  5                  10                  15

Ser Ala Ala Cys Gly His Cys Gln Arg Leu Gln Pro Thr Trp Asn Asp  
                   20                  25                  30

Leu Gly Asp Lys Tyr Asn Ser Met Glu Xaa Ala Lys Val Tyr Val Ala  
           35                  40                  45

Lys Val Asp Cys Thr Ala His Ser Asp Val Cys Ser Ala Gln Gly Val  
           50                  55                  60

Arg Gly Tyr Pro Thr Leu Lys Leu Phe Lys Pro Gly Gln Glu Ala Val

65		70		75		80
Lys Tyr Gln Gly	Pro Arg Asp Phe Gln Thr Leu Glu Asn Trp Met Leu					
	85		90		95	
Gln Thr Leu Asn Glu Glu Pro Val Thr Pro Glu Pro Glu Val Glu Pro						
	100		105		110	
Pro Ser Ala Pro Glu Leu Lys Gln Gly Leu Tyr Glu Leu Ser Ala Ser						
	115		120		125	
Asn Phe Glu Leu His Val Ala Gln Gly Asp His Phe Ile Lys Phe Phe						
	130		135		140	
Ala Pro Trp Cys Gly His Cys Lys Ala Leu Ala Pro Thr Trp Glu Gln						
	145		150		155	160
Leu Ala Leu Gly Leu Glu His Ser Glu Thr Val Lys Ile Gly Lys Val						
	165		170		175	
Asp Cys Thr Gln His Tyr Glu Leu Cys Ser Gly Asn Gln Val Arg Gly						
	180		185		190	
Tyr Pro Thr Leu Leu Trp Phe Arg Asp Gly Lys Lys Val Asp Gln Tyr						
	195		200		205	
Lys Gly Lys Arg Asp Leu Glu Ser Leu Arg Glu Tyr Val Glu Ser Gln						
	210		215		220	
Leu Gln Arg Thr Glu Thr Gly Ala Thr Glu Thr Val Thr Pro Ser Glu						
	225		230		235	240
Ala Pro Val Leu Ala Ala Glu Pro Glu Ala Asp Lys Gly Thr Val Leu						
	245		250		255	
Ala Leu Thr Glu Asn Asn Phe Asp Asp Thr Ile Ala Glu Gly Ile Thr						
	260		265		270	
Phe Ile Lys Phe Tyr Ala Pro Trp Cys Gly His Cys Lys Thr Leu Ala						
	275		280		285	
Pro Thr Trp Glu Glu Leu Ser Lys Lys Glu Phe Pro Gly Leu Ala Gly						
	290		295		300	
Val Lys Ile Ala Glu Val Asp Cys Thr Ala Glu Arg Asn Ile Cys Ser						
	305		310		315	320
Lys Tyr Ser Val Arg Gly Tyr Pro Thr Leu Leu Leu Phe Arg Gly Gly						
	325		330		335	
Lys Lys Val Ser Glu His Ser Gly Gly Arg Asp Leu Asp Ser Leu His						
	340		345		350	
Arg Phe Val Leu Ser Gln Ala Lys Asp Glu Leu						
	355		360			

&lt;210&gt; 352

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 352

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Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu Arg Gly Leu
 1           5           10           15

Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser Ala Ser Glu
      20           25           30

Ile Pro Lys Gly Lys Gln Lys Ala His Ser Gly Arg Gly Arg Trp Trp
      35           40           45

Thr Cys Ile Met Glu Cys Ala Tyr Lys Gly Gln Gln Glu Cys Leu Val
      50           55           60

Glu Thr Gly Ala Leu Gly Pro Met Ala Phe Arg Val His Leu Gly Ser
      65           70           75           80

Gln Val Gly Met Asp Ser Lys Glu Lys Arg Gly Asn Val
      85           90

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&lt;210&gt; 353

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (210)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 353

```

Glu Thr Arg Val Lys Thr Ser Leu Glu Leu Leu Arg Thr Gln Leu Glu
 1           5           10           15

Pro Thr Gly Thr Val Gly Asn Thr Ile Met Thr Ser Gln Pro Val Pro
      20           25           30

Asn Glu Thr Ile Ile Val Leu Pro Ser Asn Val Ile Asn Phe Ser Gln
      35           40           45

Ala Glu Lys Pro Glu Pro Thr Asn Gln Gly Gln Asp Ser Leu Lys Lys
      50           55           60

His Leu His Ala Glu Ile Lys Val Ile Gly Thr Ile Gln Ile Leu Cys
      65           70           75           80

Gly Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe
      85           90           95

Ser Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr
      100           105           110

Pro Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile
      115           120           125

Ala Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val

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239

130                      135                      140  
 Gly Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu  
 145                      150                      155                      160  
 Ser Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu  
                     165                      170                      175  
 Asp Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His  
                     180                      185                      190  
 Asp Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala  
                     195                      200                      205  
 Gly Xaa Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu  
                     210                      215                      220  
 Ala Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe  
 225                      230                      235                      240  
 Pro Gly Ser Val Leu Phe Leu Pro His Ser Tyr Ile Gly Asn Ser Gly  
                     245                      250                      255  
 Met Ser Ser Lys Met Thr His Asp Cys Gly Tyr Glu Glu Leu Leu Thr  
                     260                      265                      270

Ser

&lt;210&gt; 354

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (129)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 354

Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe Ser  
 1                      5                      10                      15

Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr Pro  
                     20                      25                      30

Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile Ala  
                     35                      40                      45

Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val Gly  
                     50                      55                      60

Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu Ser  
                     65                      70                      75                      80

Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu Asp  
                     85                      90                      95

240

Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His Asp  
 100 105 110  
 Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala Gly  
 115 120 125  
 Xaa Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu Ala  
 130 135 140  
 Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe Pro  
 145 150 155 160  
 Gly Ser Val Leu Phe Leu Pro His Ser Tyr Ile Gly Asn Ser Gly Met  
 165 170 175  
 Ser Ser Lys Met Thr His Asp Cys Gly Tyr Glu Glu Leu Leu Thr Ser  
 180 185 190

&lt;210&gt; 355

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (119)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 355

Gly Ala Ser Cys Glu Gly Gly Gly Ala Ala Ala Arg Ala Ala Leu Gly  
 1 5 10 15  
 Val His Arg Ser Gln Lys Ala Leu Leu Val Phe Arg Arg Thr Leu Ser  
 20 25 30  
 Asn Leu Leu Tyr Met Pro Leu Leu Arg Gly Leu Leu Trp Leu Gln Val  
 35 40 45  
 Leu Cys Ala Gly Pro Leu His Thr Glu Ala Val Val Leu Leu Val Pro  
 50 55 60  
 Ser Asp Asp Gly Arg Ala Phe Leu Leu Arg Ser Arg Leu Leu His Pro  
 65 70 75 80  
 Glu Ala His Val Pro Pro Ala Ala Asp Arg Gly Ala Ser Leu Gln Cys  
 85 90 95  
 Val Leu His Gln Ala Ala Pro Lys Ser Arg Pro Arg Ser Pro Ala Ala  
 100 105 110  
 Gly Ala Ala Leu Leu His Xaa Pro Arg Arg Thr Gly Asp Glu Pro Cys  
 115 120 125  
 Arg Glu Phe His Gly Asn Gly Phe Pro Gly Pro Thr Gln Leu Thr Pro  
 130 135 140

Gly Glu Cys Gly Leu Pro Ala Pro Ser Ser Leu Leu Gln His Ala Ser  
145 150 155 160

Ala Pro Val Arg Thr Gly Ser Glu Gly Gln Val Val Gly Cys Pro Arg  
165 170 175

Ala Arg Gly Glu Thr Gly Glu Gly Leu Ser Leu Ala Phe Leu Ser Ser  
180 185 190

Leu Met Phe Thr Ser Arg Asn Gly Leu Val Gly Cys  
195 200

<210> 356

<211> 72

<212> PRT

<213> Homo sapiens

<400> 356

Met Gly Ser Ala Ala Leu Glu Ile Leu Gly Leu Val Leu Cys Leu Val  
1 5 10 15

Gly Trp Gly Gly Leu Ile Leu Ala Cys Gly Leu Pro Met Trp Gln Val  
20 25 30

Thr Ala Phe Leu Asp His Asn Ile Val Thr Ala Gln Thr Thr Trp Lys  
35 40 45

Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr Gly Thr Cys Ser Ala  
50 55 60

Lys Cys Thr Thr Arg Cys Trp Leu  
65 70

<210> 357

<211> 115

<212> PRT

<213> Homo sapiens

<400> 357

Leu Lys Arg Ala Pro Pro Gly Pro Ala Leu Ala Lys Gly Leu Leu Gln  
1 5 10 15

Pro Ser Ser Thr Phe Gln Ala Leu Glu Thr Asn Ile Gly Asp Gln Val  
20 25 30

Arg Arg His Ser Thr Ala Val Val Ile Arg Glu Met Thr Ser Tyr Ile  
35 40 45

Leu Ile Ser Phe Val Leu Leu Ile Gly Val Gly Cys Ile Glu Lys Asp  
50 55 60

Gln Ser Cys Pro Val Phe Gly Gly Arg Lys Arg Leu His Leu Leu Phe  
65 70 75 80

Val Gly Gly Gln Leu Arg Gln Val Arg Met Leu Arg Gly Glu Leu Ser  
85 90 95

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<210> 358
<211> 88
<212> PRT
<213> Homo sapiens
```

Met Ala Arg Gly Cys Val Cys Ser Leu Cys Ala Ser Val Cys Ile Phe  
20 25 30

Ile Ser Cys Leu Leu Leu Ser Lys Cys Phe Glu Gly Leu Glu Leu Met  
50 55 60

Cys Glu His Leu Tyr Gln Leu Ser Gln Leu His Val Leu His His Ile  
65 70 75 80

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<210> 359
<211> 716
<212> PRT
<213> Homo sapiens
```

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<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
```

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<220>
<221> SITE
<222> (373)
<223> Xaa equals any of the naturally occurring L-amino acids
```

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<220>  
<221> SITE  
<222> (705)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 359  
Tyr Xaa Ile Pro Gly Ser Thr His Ala Ser Gly Arg Gln Arg Gly Ser  
1 5 10 15

Gly Arg Gly Glu Asp Asp Ser Gly Pro Pro Pro Ser Thr Val Ile Asn  
20 25 30

Gln Asn Glu Thr Phe Ala Asn Ile Ile Phe Lys Pro Thr Val Val Gln  
           35                          40                          45  
 Gln Ala Arg Ile Ala Gln Asn Gly Ile Leu Gly Asp Phe Ile Ile Arg  
           50                          55                          60  
 Tyr Asp Val Asn Arg Glu Gln Ser Ile Gly Asp Ile Gln Val Leu Asn  
           65                          70                          75                          80  
 Gly Tyr Phe Val His Tyr Phe Ala Pro Lys Asp Leu Pro Pro Leu Pro  
                           85                          90                          95  
 Lys Asn Val Val Phe Val Leu Asp Ser Ser Ala Ser Met Val Gly Thr  
                           100                          105                          110  
 Lys Leu Arg Gln Thr Lys Asp Ala Leu Phe Thr Ile Leu His Asp Leu  
           115                          120                          125  
 Arg Pro Gln Asp Arg Phe Ser Ile Ile Gly Phe Ser Asn Arg Ile Lys  
           130                          135                          140  
 Val Trp Lys Asp His Leu Ile Ser Val Thr Pro Asp Ser Ile Arg Asp  
           145                          150                          155                          160  
 Gly Lys Val Tyr Ile His His Met Ser Pro Thr Gly Gly Thr Asp Ile  
                           165                          170                          175  
 Asn Gly Val Leu Gln Arg Ala Ile Arg Leu Leu Asn Lys Tyr Val Ala  
                           180                          185                          190  
 His Ser Gly Ile Gly Asp Arg Ser Val Ser Leu Ile Val Phe Leu Thr  
           195                          200                          205  
 Asp Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu Lys Ile Leu Asn  
           210                          215                          220  
 Asn Thr Arg Glu Ala Ala Arg Gly Gln Val Cys Ile Phe Thr Ile Gly  
           225                          230                          235                          240  
 Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu Lys Leu Ser Leu Glu  
                           245                          250                          255  
 Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu Glu Asp Ala Gly Ser  
           260                          265                          270  
 Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr Pro Leu Leu Ser Asp  
           275                          280                          285  
 Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val Val Gln Ala Thr Lys Thr  
           290                          295                          300  
 Leu Phe Pro Asn Tyr Phe Asn Gly Ser Glu Ile Ile Ile Ala Gly Lys  
           305                          310                          315                          320  
 Leu Val Asp Arg Lys Leu Asp His Leu His Val Glu Val Thr Ala Ser  
                           325                          330                          335  
 Asn Ser Lys Lys Phe Ile Ile Leu Lys Thr Asp Val Pro Val Arg Pro

340	345	350
Gln Lys Ala Gly Lys Asp Val Thr Gly Ser Pro Arg Pro Gly Gly Asp 355 360 365		
Gly Glu Gly Asp Xaa Asn His Ile Glu Arg Leu Trp Ser Tyr Leu Thr 370 375 380		
Thr Lys Glu Leu Leu Ser Ser Trp Leu Gln Ser Asp Asp Glu Pro Glu 385 390 395 400		
Lys Glu Arg Leu Arg Gln Arg Ala Gln Ala Leu Ala Val Ser Tyr Arg 405 410 415		
Phe Leu Thr Pro Phe Thr Ser Met Lys Leu Arg Gly Pro Val Pro Arg 420 425 430		
Met Asp Gly Leu Glu Glu Ala His Gly Met Ser Ala Ala Met Gly Pro 435 440 445		
Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly Thr Gln Pro Gly Pro 450 455 460		
Leu Leu Lys Lys Pro Tyr Gln Pro Arg Ile Lys Ile Ser Lys Thr Ser 465 470 475 480		
Val Asp Gly Asp Pro His Phe Val Val Asp Phe Pro Leu Ser Arg Leu 485 490 495		
Thr Val Cys Phe Asn Ile Asp Gly Gln Pro Gly Asp Ile Leu Arg Leu 500 505 510		
Val Ser Asp His Arg Asp Ser Gly Val Thr Val Asn Gly Glu Leu Ile 515 520 525		
Gly Ala Pro Ala Pro Pro Asn Gly His Lys Lys Gln Arg Thr Tyr Leu 530 535 540		
Arg Thr Ile Thr Ile Leu Ile Asn Lys Pro Glu Arg Ser Tyr Leu Glu 545 550 555 560		
Ile Thr Pro Ser Arg Val Ile Leu Asp Gly Gly Asp Arg Leu Val Leu 565 570 575		
Pro Cys Asn Gln Ser Val Val Val Gly Ser Trp Gly Leu Glu Val Ser 580 585 590		
Val Ser Ala Asn Ala Asn Val Thr Val Thr Ile Gln Gly Ser Ile Ala 595 600 605		
Phe Val Ile Leu Ile His Leu Tyr Lys Lys Pro Ala Pro Phe Gln Arg 610 615 620		
His His Leu Gly Phe Tyr Ile Ala Asn Ser Glu Gly Leu Ser Ser Asn 625 630 635 640		
Cys His Gly Leu Leu Gly Gln Phe Leu Asn Gln Asp Ala Arg Leu Thr 645 650 655		

Glu Asp Pro Ala Gly Pro Ser Gln Asn Leu Thr His Pro Leu Leu Leu  
660 665 670

Gln Val Gly Glu Gly Pro Glu Ala Val Leu Thr Val Lys Gly His Gln  
675 680 685

Val Pro Val Val Trp Lys Gln Arg Lys Ile Tyr Asn Gly Glu Glu Gln  
690 695 700

Xaa Asp Cys Trp Phe Ala Arg Asn Met Pro Pro Asn  
705 710 715

<210> 360

<211> 387

<212> PRT

<213> Homo sapiens

<400> 360

Pro Arg Val Arg Ser Ile Lys Val Thr Glu Leu Lys Gly Leu Ala Asn  
1 5 10 15

His Val Val Val Gly Ser Val Ser Cys Glu Thr Lys Asp Leu Phe Ala  
20 25 30

Ala Leu Pro Gln Val Val Ala Val Asp Ile Asn Asp Leu Gly Thr Ile  
35 40 45

Lys Leu Ser Leu Glu Val Thr Trp Ser Pro Phe Asp Lys Asp Asp Gln  
50 55 60

Pro Ser Ala Ala Ser Ser Val Asn Lys Ala Ser Thr Val Thr Lys Arg  
65 70 75 80

Phe Ser Thr Tyr Ser Gln Ser Pro Pro Asp Thr Pro Ser Leu Arg Glu  
85 90 95

Gln Ala Phe Tyr Asn Met Leu Arg Arg Gln Glu Glu Leu Glu Asn Gly  
100 105 110

Thr Ala Trp Ser Leu Ser Ser Glu Ser Ser Asp Asp Ser Ser Ser Pro  
115 120 125

Gln Leu Ser Gly Thr Ala Arg His Ser Pro Ala Pro Arg Pro Leu Val  
130 135 140

Gln Gln Pro Glu Pro Leu Pro Ile Gln Val Ala Phe Arg Arg Pro Glu  
145 150 155 160

Thr Pro Ser Ser Gly Pro Leu Asp Glu Glu Gly Ala Val Ala Pro Val  
165 170 175

Leu Ala Asn Gly His Ala Pro Tyr Ser Arg Thr Leu Ser His Ile Ser  
180 185 190

Glu Ala Ser Val Asn Ala Ala Leu Ala Glu Ala Ser Val Glu Ala Val  
195 200 205

Gly Pro Lys Ser Leu Ser Trp Gly Pro Ser Pro Pro Thr His Pro Ala

210                      215                      220  
 Pro Thr His Gly Lys His Pro Ser Pro Val Pro Pro Ala Leu Asp Pro  
 225                      230                      235                      240  
 Gly His Ser Ala Thr Ser Ser Thr Leu Gly Thr Thr Gly Ser Val Pro  
                     245                      250                      255  
 Thr Ser Thr Asp Pro Ala Pro Ser Ala His Leu Asp Ser Val His Lys  
                     260                      265                      270  
 Ser Thr Asp Ser Gly Pro Ser Glu Leu Pro Gly Pro Thr His Thr Thr  
                     275                      280                      285  
 Thr Gly Ser Thr Tyr Ser Ala Ile Thr Thr Thr His Ser Ala Pro Ser  
                     290                      295                      300  
 Pro Leu Thr His Thr Thr Thr Gly Ser Thr His Lys Pro Ile Ile Ser  
 305                      310                      315                      320  
 Thr Leu Thr Thr Thr Gly Pro Thr Leu Asn Ile Ile Gly Pro Val Gln  
                     325                      330                      335  
 Thr Thr Thr Ser Pro Thr His Thr Met Pro Ser Pro Ser Ser His Ser  
                     340                      345                      350  
 Asn Ser Pro Gln Tyr Val Asp Phe Cys Ser Ser Val Cys Asp Asn Ile  
                     355                      360                      365  
 Phe Val His Tyr Val Ile Gly Ile Phe Phe His Thr Leu Tyr Ser Ser  
                     370                      375                      380

Lys Thr Leu  
385

<210> 361  
 <211> 260  
 <212> PRT  
 <213> Homo sapiens

<400> 361  
 Pro Arg Val Arg Ser Ile Lys Val Thr Glu Leu Lys Gly Leu Ala Asn  
 1                      5                      10                      15  
 His Val Val Val Gly Ser Val Ser Cys Glu Thr Lys Asp Leu Phe Ala  
                     20                      25                      30  
 Ala Leu Pro Gln Val Val Ala Val Asp Ile Asn Asp Leu Gly Thr Ile  
                     35                      40                      45  
 Lys Leu Ser Leu Glu Val Thr Trp Ser Pro Phe Asp Lys Asp Asp Gln  
                     50                      55                      60  
 Pro Ser Ala Ala Ser Ser Val Asn Lys Ala Ser Thr Val Thr Lys Arg  
 65                      70                      75                      80  
 Phe Ser Thr Tyr Ser Gln Ser Pro Pro Asp Thr Pro Ser Leu Arg Glu  
                     85                      90                      95

Gln Ala Phe Tyr Asn Met Leu Arg Arg Gln Glu Glu Leu Glu Asn Gly  
                   100                                  105                                  110  
 Thr Ala Trp Ser Leu Ser Ser Glu Ser Ser Asp Asp Ser Ser Ser Pro  
                   115                                  120                                  125  
 Gln Leu Ser Gly Thr Ala Arg His Ser Pro Ala Pro Arg Pro Leu Val  
                   130                                  135                                  140  
 Gln Gln Pro Glu Pro Leu Pro Ile Gln Val Ala Phe Arg Arg Pro Glu  
                   145                                  150                                  155                                  160  
 Thr Pro Ser Ser Gly Pro Leu Asp Glu Glu Gly Ala Val Ala Pro Val  
                                   165                                  170                                  175  
 Leu Ala Asn Gly His Ala Pro Tyr Ser Arg Thr Leu Ser His Ile Ser  
                                   180                                  185                                  190  
 Glu Ala Ser Val Asn Ala Ala Leu Ala Glu Ala Ser Val Glu Ala Val  
                   195                                  200                                  205  
 Gly Pro Lys Ser Leu Ser Trp Gly Pro Ser Pro Pro Thr His Pro Ala  
                   210                                  215                                  220  
 Pro Thr His Gly Lys His Pro Ser Pro Val Pro Pro Ala Leu Asp Pro  
                   225                                  230                                  235                                  240  
 Gly His Ser Ala Thr Ser Ser Thr Leu Gly Thr Thr Gly Ser Val Pro  
                                   245                                  250                                  255  
 Thr Ser Thr Asp  
                                   260

&lt;210&gt; 362

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 362

Tyr Gly Cys Glu Lys Thr Thr Glu Gly Gly Arg Arg Arg Arg Arg Arg  
   1                                  5                                  10                                  15  
 Met Glu Ala Val Val Phe Val Phe Ser Leu Leu Asp Cys Cys Ala Leu  
                   20                                  25                                  30  
 Ile Phe Leu Ser Val Tyr Phe Ile Ile Thr Leu Ser Asp Leu Glu Cys  
                   35                                  40                                  45  
 Asp Tyr Ile Asn Ala Arg Ser Cys Cys Ser Lys Leu Asn Lys Trp Val  
                   50                                  55                                  60  
 Ile Pro Glu Leu Ile Gly His Thr Ile Val Thr Val Leu Leu Leu Met  
                   65                                  70                                  75                                  80  
 Ser Leu His Trp Phe Ile Phe Leu Leu Asn Leu Pro Val Ala Thr Trp  
                                   85                                  90                                  95

Asn Ile Tyr Arg Tyr Ile Met Val Pro Ser Gly Asn Met Gly Val Phe  
 100 105 110

Asp Pro Thr Glu Ile His Asn Arg Gly Gln Leu Lys Ser His Met Lys  
 115 120 125

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<211> 70

<212> PRT

<213> Homo sapiens

<400> 363

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 20 25 30

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 65 70

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<211> 56

<212> PRT

<213> Homo sapiens

<400> 364

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 1 5 10 15

Ala Val Pro Leu Phe Leu Tyr Ile Phe Thr Leu Leu Pro Leu Leu Pro  
 20 25 30

Phe Leu Leu Ser Leu Cys Phe Ser Pro Leu Thr Val Lys Arg Ser Ser  
 35 40 45

Ser Ser Glu Ser Lys Ser Ser Leu  
 50 55

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/17130

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☒ Claims Nos.: 1-23  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

Please See Extra Sheet.

3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/17130

## A. CLASSIFICATION OF SUBJECT MATTER:

IPC (6):

C12N 1/21, 5/10, 15/11, 15/12, 15/63; A61K 38/16, 38/17; C07K 14/00, 14/435, 16/00; G01N 33/50

## A. CLASSIFICATION OF SUBJECT MATTER:

US CL :

536/23.1, 23.5; 435/69.1, 320.1, 252.3, 325, 6, 7.1; 530/350, 300, 387.1; 514/2

## BOX I. OBSERVATIONS WHERE CLAIMS WERE FOUND UNSEARCHABLE

### 2. Where no meaningful search could be carried out, specifically:

All of the claims were unsearchable to the extent that they require reference to sequences from the sequence listing or an ATCC deposit. However, the specific sequence and deposit numbers were replaced in the claims with generic designators X, Y and Z. Therefore, no meaningful search of the sequences or deposits per se can be carried out by this Authority. The subject matter of the claims has been searched only to the extent possible with reference to the balance of the description.

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US99/17130

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : Please See Extra Sheet.

US CL : Please See Extra Sheet.

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 536/23.1, 23.5; 435/69.1, 320.1, 252.3, 325, 6, 7.1; 530/350, 300, 387.1; 514/2

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS, DIALOG - Biotech Files

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JACOBS, K. A. et al. A Genetic Selection For Isolating cDNAs Encoding Secreted Proteins. Gene. 1997, Vol. 198, pages 289-296, see entire document.	1-23



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*B* earlier document published on or after the international filing date	*Y* document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

05 OCTOBER 1999

Date of mailing of the international search report

21 OCT 1999

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

ELIZABETH C KEMMERER

Telephone No. (703) 308-0196

**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

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**NETHERLANDS**


The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PZ031PCT	International application:	Unassigned
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### INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

<b>A. The indications made below relate to the microorganism referred to in the description</b> on page <u>243</u> , line <u>N/A</u>	
<b>B. IDENTIFICATION OF DEPOSIT</b>	
Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>June 11, 1998</u>	Accession Number <u>209965</u>
<b>C. ADDITIONAL INDICATIONS</b> (leave blank if not applicable)	
This information is continued on an additional sheet <input type="checkbox"/>	
<b>D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE</b> (if the indications are not for all designated States)	
<u>Europe</u> In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).	
<b>E. SEPARATE FURNISHING OF INDICATIONS</b> (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only	For International Bureau use only
<input checked="checked" type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer  J. J. Smith PCO - International Division	Authorized officer

**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PZ031PCT	International application	Unassigned
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

<b>A.</b> The indications made below relate to the microorganism referred to in the description on page <u>249</u> line <u>N/A</u>	
<b>B. IDENTIFICATION OF DEPOSIT</b> Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country)  10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit  June 26, 1998	Accession Number  203027
<b>C. ADDITIONAL INDICATIONS</b> (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
<b>D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE</b> (if the indications are not for all designated States)  Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).	
<b>E. SEPARATE FURNISHING OF INDICATIONS</b> (leave blank if not applicable)  The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	
For receiving Office use only <input checked="" type="checkbox"/> This sheet was received with the international application  Authorized officer <u>Yvette E. Summs</u> PCT International Division	For International Bureau use only <input type="checkbox"/> This sheet was received by the International Bureau on:  Authorized officer

**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

**NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

**AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

**FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

**UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

Applicant's or agent's file reference number	PZ031PCT	International application	Unassigned
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>253</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country)  10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit  July 27, 1998	Accession Number  203071
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)  Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)  The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only	For International Bureau use only
<input checked="" type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer  Yusef E. Shmida PCT International Division	Authorized officer

**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

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**NETHERLANDS**

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Applicant's or agent's file reference number	PZ031PCT	International application
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>259</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country)  10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit  July 27, 1998	Accession Number  203070
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)  Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)  The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only
<input checked="" type="checkbox"/> This sheet was received with the international application
Authorized officer <i>Yvette E. Simmons</i> PCT International Division

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<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer

**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

**NORWAY**

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**AUSTRALIA**

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**FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

**UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

Applicant's or agent's file reference number	PZ031PCT	International application	Unassigned
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

REC'D 18 AUG 1999

A. The indications made below relate to the microorganism referred to in the description on page <u>260</u> line <u>N/A</u>		WIPO	PCT
B. IDENTIFICATION OF DEPOSIT		Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection			
Address of depositary institution (including postal code and country)  10801 University Boulevard Manassas, Virginia 20110-2209 United States of America			
Date of deposit  July 27, 1998		Accession Number  203069	
C. ADDITIONAL INDICATIONS (leave blank if not applicable)		This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)			
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).			
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)			
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")			

For receiving Office use only
<input checked="" type="checkbox"/> This sheet was received with the international application
Authorized officer Yvette C. Smith PCT International Division

For International Bureau use only
<input checked="" type="checkbox"/> This sheet was received by the International Bureau on:  18 AUGUST 1999
Authorized officer P. G. G. G.

**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

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**CANADA**

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The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

**FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

**UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

**NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

**AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

**FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

**UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.